LIVING WITH THEIR HEADS UP:

THE EFFECTS OF LIMITING ELECTRONIC TECHNOLOGY ON THE SPIRITUAL GROWTH OF STUDENTS PARTICIPATING IN A GAP YEAR PROGRAM

A THESIS-PROJECT

SUBMITTED TO THE FACULTY OF

GORDON-CONWELL THEOLOGICAL SEMINARY

IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE DEGREE

DOCTOR OF MINISTRY

BY

DEREK J. MELLEBY

JANUARY 2020

DEDICATION

For Heidi and the Melleboys, Jacob, Nathan and Simon.

This project never would have been completed without your encouragement and love.

May this contribution help us grow closer to God and each other.

“But between the muddy rural beginning of the garden and the gleaming urban finale, we must fill in the story, because that’s where we find ourselves: east of Eden, west of the Great City, journeying now in God’s sovereignly guided history, holding smartphones.”

– Tony Reinke

“Christian discipleship that is going to be intentional and formative needs to be attentive to all the rival formations we are immersed in.”

– James K. A. Smith

“Technology makes us forget what we know about life. We become enchanted by technology’s promises because we have so many problems we would like technology to solve.”

– Sherry Turkle

“As we grow more accustomed to and dependent on our computers we will be tempted to entrust to them ‘tasks that demand wisdom.’ And once we do that, there will be no turning back.”

– Nicholas Carr

“What is clear is that, to date, computer technology has served to strengthen Technopoly’s hold, to make people believe that technological innovation is synonymous with human progress.”

– Neil Postman

“When media and the digital world become omnipresent, their influence can stop people from learning how to live wisely, to think deeply, and to love generously. In this context, the great sages of the past run the risk of going unheard amid the noise and distractions of an information overload.”

– Pope Francis

“The tycoons of social media have to stop pretending that they’re friendly nerd gods building a better world and admit they’re just tobacco farmers in T-shirts selling an addictive product to children. Because, let’s face it, checking your ‘likes’ is the new smoking… Philip Morris just wanted your lungs. The App Store wants your soul.”

– Bill Maher

CONTENTS

ABSTRACT

This thesis-project examines the effects of limiting the use of electronic devices, such as computers, tablets and smartphones, on the spiritual growth of students participating in a nine-month, residential, gap year program. The main focus of the project is reporting the findings of in-depth, semi-structured interviews with students who had their use of electronic technology significantly reduced over a nine-month time period.

The project develops a theology of technology in order to explore the place of technology within the biblical narrative. There is also a review of current research related to the effects of electronic technology on adolescent development, contemporary culture and the brain. Recommendations are given to parents and youth workers who are considering intentionally reducing the use of electronic technology in the home and ministry setting.

CHAPTER 1: THE PROBLEM AND ITS SETTING

INTRODUCTION

"I remember thinking, 'You're taking my cell phone away? I knew this was a cult,'" said a former OneLife student reflecting on what she originally thought when learning about the OneLife program's cell phone policy. The student concluded, "But really, not having my cell phone for nine months was probably the best thing that ever happened to me." The main objective of the following thesis project is to answer one question: what happens to students in a gap year program when their use of electronic devices,[1] especially mobile phones, is significantly reduced and limited? The main focus will be on the students' words and descriptions themselves, allowing the students to explain, in their own words, what they experienced and discovered. In other words, the exposition will tell a story of how students, such as the one above, shifted from being skeptical and nervous about having their cell phones "taken away" to discovering and determining that it was perhaps one of the most meaningful and important experiences of their young lives.

MINISTRY SETTING

The OneLife Institute (hereafter "OneLife") was established in 2012, welcoming its first class of gap year students on the campus of Lancaster Bible College. The stated vision and mission of OneLife is as follows:

- Vision: to see the often distracted lives of emerging adults fixated on the only reason to live: for God and His Glory.

1 For the purposes of this thesis-project, unless a specific device is specified, the term "electronic devices" refers to any electronic device that connects to the Internet (e.g. computers, tablets and smartphones).

- Mission: to develop and launch servant leaders who live out their Christian faith in every area of life.

This vision and mission is fulfilled by creating a nine-month, residential, gap year programs for students between high school and college.

GAP YEAR DEFINED

A "gap year" can be defined as "a break from formal education in order to become immersed in another culture, to volunteer domestically or abroad, to gain experience and maturity, to improve your skills in a sport, language, the arts, or academics, or take on some combination of any of these things."[2] A gap year is taking "time off with a purpose."[3] It is an intentional time of reflection and discovery before a major transition in life. Taking a gap year first began popular in the United Kingdom dating back to as early as the late seventeenth century and is now very prevalent among students in other parts of the world including Australia, New Zealand, Canada and Japan.[4]

The popularity of taking a gap year is increasing in the United States as well, especially in the last thirty years, when colleges and universities began to encourage students to take a gap year before going to college. Harvard College was the first college to defer enrollment in order to create the space necessary for students to do so. In the last decade, Harvard has experienced a

2 Kristin M. White, *The Complete Guide to the Gap Year: The Best Things to Do between High School and College* (San Francisco, CA: Jossey-Bass, 2009), 7.

3 Karl Haigler, and Rae Nelson, *The Gap Year Advantage: Helping Your Child Benefit from Time off Before or During College* (New York, NY: St. Martins Griffin, 2005), 21.

4 For more on the history of students taking a gap year see the introductory chapters of the following: Karl Haigler, and Rae Nelson, *The Gap Year Advantage: Helping Your Child Benefit from Time off Before or During College* (New York, NY: St. Martins Griffin, 2005); Joseph O'Shea, *Gap Year: How Delaying College Changes People in Ways the World Needs* (Baltimore, MD: John Hopkins University Press, 2014); Kristin M. White, Kristin M. *The Complete Guide to the Gap Year: The Best Things to Do between High School and College* (San Francisco, CA: Jossey-Bass, 2009).

thirty three percent increase in the number of students taking a gap year.[5] Many other colleges and universities have followed suit, deferring enrollment and creating incentives for students who have participated in gap year programs before entering traditional undergraduate programs.[6]

The growing popularity of taking a gap year may increase even more in the coming years. Malia Obama, the eldest daughter of former President Barack Obama, took a gap year before attending Harvard University in 2017. *The New York Times* reported, "In deferring her start date until 2017, Malia, 17, is availing herself of the opportunity to take a 'gap year,' a popular option for high school seniors who are seeking experiences outside the classroom — some in far-flung parts of the world — before they begin pursuing a degree. Harvard actively encourages admitted students to do so."[7] After Prince William and Prince Harry took gap years that were well-chronicled by major media outlets, The United Kingdom reported a fifteen percent increase in the number of students taking a gap year in the years that followed.[8]

THE BENEFITS OF TAKING A GAP YEAR

Taking a gap year before going to college is more than just a trend, however. Kristin White, in her book *The Complete Guide to the Gap Year* suggests, "It is a movement in education that recognizes our global economy, our shrinking borders, and our need for public service. It is a response to our students' need for a year to find purpose in their lives or to their yearning to take a break from achievement for its own sake and awaken their love of learning

5 O'Shea, *Gap Year*, 3.

6 O'Shea, *Gap Year*, 3.

7 Julie Hirschfeld Davis and Nicholas Fandos, "Malia Obama to Attend Harvard, but Not Until 2017," *The New York Times*, May 1, 2016, https://www.nytimes.com/2016/05/02/us/politics/malia-obama-to-attend-harvard-but-not-until-2017.html (accessed September 7, 2019).

8 Haigler and Nelson, *The Gap-Year Advantage*, 22.

again."[9] Educators Karl Haigler and Rae Nelson reported similar findings in their groundbreaking book *The Gap-Year Advantage*:

> The benefits of a gap-year plan include gaining confidence, focus, and discipline, being able to bridge the gap between formal education and the real world, and building a resume that will put students ahead of their peers in appealing to employers or graduate schools. In addition, students (and their parents) with a gap-year plan may save thousands of dollars in college tuition, student loans, and scholarship. Less tangible, but perhaps more important, gap-year students will have the experience of taking responsibility for their lives and thereby gaining greater perspective on their place in the world and how they may uniquely contribute to their communities and families now and in the future.[10]

Haigler and Nelson highlight three benefits of taking a gap year that are vital to the success of contemporary students and motivate the vision of the OneLife program: (1) increased focus; (2) economic return; and (3) gaining perspective on their place in the world.

First, taking a gap year brings focus. In her book *The Defining Decade*, psychologist and long-time college professor, Meg Jay, reported on what she learned after many years counseling college students. She writes, "There are fifty million twentysomethings in the United States, most of whom are living with a staggering, unprecedented amount of uncertainty.... Uncertainty makes people anxious, and distraction is the twenty-first-century opiate of the masses."[11] According to *The Princeton Review*, an organization dedicated to helping students succeed in college states the following about the benefits of taking a gap year,

> Likes and dislikes, plans for the future, and even the reason why you want to be in school can come into sharper focus with a simple change in environment. Time off can give students added focus and enthusiasm when they return to school. If a student isn't ready for college, time off can cultivate maturity and self-discipline … Admissions counselors at professional schools tell us that taking time off for school is rarely a disadvantage for an applicant. In fact, they often choose the student who took a year off and is ready to

9 White, *The Complete Guide to the Gap Year*, 7.

10 Haigler and Nelson, *The Gap-Year Advantage*, 10-11.

11 Meg Jay, *The Defining Decade: Why Your Twenties Matter and How to Make the Most of Them Now* (New York, NY: Twelve Publishing, 2016), xxi.

become fully engaged in school over the one who has been on autopilot and will burn out in a few months.[12]

Many students simply go through the motions: they go to high school, they go to college, they get a job and very few are reflective on why they are doing what they are doing. A gap year can provide a remarkable opportunity to take a "time-out," to be forced out of a routine, and into deeper engagement with life and learning.

Second, taking a gap year has a potential economic benefit. College costs and student debt continues to rise. Since 1983, *US News & World Report* has been ranking the "best colleges" in the United State. Of the colleges that appear on their list, from 1995 to 2015 the average tuition and fees at private Universities increased 179 percent; out-of-state tuition and fees at public universities rose 226 percent; in-state tuition and fees at public Universities grew 296 percent.[13] Moreover, seventy percent of students graduate with loans and the average 2016 graduate holds $37,172 in student debt.[14] Taking time off before going to college could actually save students money. In the article, "How to Become a World Citizen, Before Going to College," *The New York Times* reporter Tanya Mohn suggests, "It makes economic sense for students to explore their interests before college, advocates of gap years say; freshmen who do so are less likely to party too much, fail courses or change majors repeatedly—all of which can result in

12 Quoted in "God in the Gap Year: The Benefits of Taking Time Off Before Going to College" by Derek Melleby, Center for Parent/Youth Understanding, 2012. Original source no longer available online.

13 Briana Boyington, "See 20 Years of Tuition Growth at National Universities," *U.S. News & World Report*, September 13, 2018, https://www.usnews.com/education/best-colleges/paying-for-college/articles/2017-09-20/see-20-years-of-tuition-growth-at-national-universities (accessed September 7, 2019).

14 Farren Powell, "10 Student Loan Facts College Grads Need to Know," *U.S. News & World Report*, May 9, 2016, https://www.usnews.com/education/best-colleges/paying-for-college/slideshows/10-student-loan-facts-college-grads-need-to-know (accessed September 7, 2019).

more time needed to graduate, and more expense."[15] A gap year is a time for students to think more thoroughly about why they are going to college, why they are studying what they are studying and what their future career plans might be.

Third, taking a gap year helps students gain perspective on their place in the world and can cultivate a desire to make a difference. In his book *Gap Year: How Delaying College Changes People in the Ways the World Needs*, Joseph O'Shea explains that gap year students

> frequently experienced a growth in their perception that they can make a difference in the world… the gap year provides an opportunity to act in a context where there were consequences—and consequences that often had real effects on others—it helped to cultivate greater feelings of personal efficacy. Specifically, having "high" levels of responsibility where their performance affected others seemed to encourage volunteers to work hard, further building their own skill set and feelings of competence as they do so.[16]

There are countless ways that students can cultivate a sense of purpose, to be sure, but taking time off from the routine of "schooling" while engaging in service to others has proven to be a formative experience for many.

Gap years can bring focus, financial benefit and purpose. Haigler and Nelson conclude: "For a number of students, a gap-year plan may make the difference between graduating successfully from college with a strategy for life beyond and floating uncertainly on a path of young adulthood that may be accompanied by significant financial and emotional costs. Through the gap year, for the first time in their highly structured lives, students may have the opportunity to discover and follow their passion and to truly live in the present."[17]

THE STORY OF THE ONELIFE GAP YEAR PROGRAM

---

15 Tonya Mohn, "How to Become a World Citizen, Before Going to College," *The New York Times*, September 3, 2006, http://www.nytimes.com/2006/09/03/business/yourmoney/03gap.html (accessed September 7, 2019).

16 O'Shea, *Gap Year*, 30-31

17 Haigler and Nelson, *The Gap-Year Advantage*, 10.

There are many benefits to taking a gap year before or during college, but an opportunity to "follow passion" and truly "live in the present" succinctly captures and animates why OneLife exists. More specifically, OneLife was created for students like Tim Meyer.

Meyer grew up in Appleton, Wisconsin. He was following a typical life path: he did well in school, planned to go college and then would hopefully get job someday. But during his senior year of high school he began to ask bigger questions. "Truthfully," Tim explained, "traditional college sounded like such a drag. After working really hard throughout high school, what did it really amount to? It didn't feel like too much, and a break from that sounded amazing."[18]

Meyer found a "break" from the typical school routine in the form of OneLife, a gap year program based on the campus of Lancaster Bible College. OneLife offers students an alternative option to the traditional first year of college. Students live in a tight, Gospel-centered community, travel domestically and overseas, engage in service projects and experiential education and earn thirty college credits.

OneLife was exactly what Meyer was looking for. "I didn't really know what I wanted to do with my life and I knew OneLife would help direct me towards what *God* wanted me to do with my life," Meyer said. "Traveling, serving, and having fun while earning credits? That's a no brainer!"

Meyer graduated with the first class of OneLife students in May 2013 and returned to Lancaster Bible College to complete his degree. As Meyer reflected on what he learned most at OneLife, the word "commitment" was central. Meyer desires to be *committed* to understanding God's Word and seeking God's will. Meyer explained,

> I want to commit to being wherever I am with all my heart. Life is a process… I don't want to be dreaming about the future when I have a mission for today: to be patient and serve Christ. David was appointed at age 17 but wasn't anointed until age 37. For 20

18 Personal interview with Tim Meyer in 2013.

> years he was waiting but during that time he was learning and growing and going through a process. I learned to keep that in mind. It's not about performance; it's about preparation for what God has planned for me. I won't dwell on the future. I trust that God's will for my life will be made evident as I seek him.

The mission of OneLife is to launch a generation of servant leaders, like Meyer, who live out their Christian faith in every area of life.

The OneLife program was founded in 2012 by Peter Sullivan. Sullivan's passion for working with young people grew out of his own experiences as a father and a business owner. His passion became even more focused when he went on a mission trip with his two daughters. Working with inner city youth in Jackson, Mississippi Sullivan came away amazed at how he and his children were ministered to as well. "Letting go of ourselves, serving, and being in a tight community with a small group of people opened up our hearts and minds to something more than ourselves and our own little worlds," Sullivan explained. "I came away with a passion to emulate this experience on a heightened level to next generation leaders."[19]

Sullivan's passion also grew as he and his wife, Debbie, walked through the college-age years with three of their five children. "We have seen firsthand areas that need to be fine-tuned and emphasized because of the insipid nature of our culture; areas that were important for our children to be grounded in before moving on to the next phase of their lives. These firsthand experiences have fueled my passion for educating the next generation."

As a previous business owner for twenty-five years, Sullivan also had a growing concern for young people starting off on their careers. He has noticed a lack of etiquette and professionalism that he thinks should mark followers of Jesus. Not only do OneLife students grow in their faith, but they also are challenged to grow as leaders as well. Students learn valuable principles for time management, personal finances and emotional intelligence.

---

19 Personal interview with Peter Sullivan in 2013.

At a time when more and more students and parents are questioning the value and worth of a college education, the model of OneLife is to provide a 9-month experience that is invaluable and effective, starting students on the right path as they enter their formative, young adult years. Sullivan captures the essence of what a OneLife education can provide: "This generation of students is searching for purpose in their lives. The OneLife program provides community, purpose, and once-in-a-lifetime experiences without having to sacrifice a year of college credits. Our hope is to build a strong foundation in the lives of today's youth, educating… them to live as next-generation leaders completely surrendered to God for His Glory."

The first class of sixteen OneLife students graduated on May 10, 2014. The second year had thirty participants, the third year had was forty participants, and the fourth year had forty-four students. Because of the increasing demand and growing popularity, OneLife expanded after year four to three different locations and enrolled a total number of seventy-one students. In the fall of 2019, OneLife will enter its seventh year of ministry and welcome four cohorts of students at four different locations with a total student count of 95:

- OneLife @ IMMERSE Ministries, Lancaster, PA
- OneLife @ Three Springs Camp, Morris, PA
- OneLife @ Pinebrook Camp, East Stroudsburg, PA
- OneLife @ Southern Wesleyan University, Central, SC

ONELIFE PROGRAM OUTCOMES

The OneLife gap year program has three stated outcomes. As a result of the program, OneLife students: (1) form Christian character; (2) clarify a biblical understanding of calling and; (3) develop relational wisdom. What follows is adapted from the "OneLife Way" student

handbook, providing a brief description of each outcome and a sample of what activities students participate in to cultivate each outcome.

Form Christian Character

Who are you – *really*? What are you seeking? Before thinking about *where* one is *going*, OneLife students must first deeply examine *who* one is *becoming*. Who one becomes is directly connected to what one is seeking, whether one knows it or not. Everything a person does shapes their character, and their character shapes everything a person does. Honest examination of true character—desires, motivations, thoughts and actions—can be difficult, but is essential to being transformed into Christlikeness. Understanding how to live life Jesus' way in the Kingdom of God provides focus and joy in a distracted and restless world. Growth in Christian character—learning to think, feel and live like Jesus—is not just an individual pursuit, but a community project. OneLife invites students to join in pursuing Christ together, in a tight-knit community. Here is a sample of what students encounter during the year related to character formation:

- Personal character assessments at the beginning, middle, and end of the year
- Intentional study of God's Word focusing on Christian virtues
- Clear exploration of the Gospel and how it shapes identity and character
- One-on-one weekly discipleship with OneLife staff members
- Wilderness trips and international travel designed to invite growth and perspective for the Christian journey

Clarify a Biblical Understanding of Calling

The Gospel of the Kingdom tells us not just what we are saved *from* but what we are saved *for*. Clarifying your calling is all about stewarding your salvation! There is no higher calling for you than to steward all that you are for God's glory and the good of your neighbors. God called

you to be a grateful contributor to His mission in the world and this is the greatest thing you can do with your life. Doing this requires that you learn to be equipped with the necessary perspective and skills that are a part of faithful living in God's world. You need to be disciplined to grow in faith, intentionally seeking Christ and applying the Gospel to *all areas* of life. This includes attending *to* and practicing the basic functions *of* being a responsible, mature adult. Being faithful to Jesus in all we do is how we begin to clarify our call. Those who are followers of Jesus are called to carry on the redemptive love and activity of God. For the biblical story to become a way of life, students must learn to look through this story to see and respond to life in their own day. As students learn to see God's story more clearly they will also begin to find purpose and calling in His world. Here is a sampling of what students encounter during the year related to clarifying a biblical understanding of calling:

- An overview and study of the entire biblical story from Genesis to Revelation
- Experiential learning "fieldtrips" to see the difference a biblical worldview makes in the "real world" and how a biblical worldview becomes a way of life
- Teaching and discussions that helps to connect the biblical notion of calling to career
- One-on-one discipleship and coaching to help discern vocational next steps

Develop Relational Wisdom

Relationships are central to a flourishing life. Navigating relationships with wisdom comes down to developing three key areas in life: self-awareness, others-awareness, and God-awareness. In a nutshell, relational wisdom may be defined as your ability to discern emotions, interests and abilities in yourself and others, to interpret this information in the light of God's Word and to use these insights to navigate your responses and relationships successfully. We are convinced that becoming relationally wise is one of the best investments we can make to our

future relationships. What is more, relational wisdom involves skills that the world needs and employers are seeking such as resolving everyday conflict, listening, empathy, humility, endurance, grit, teamwork, effective communication and self-management. Developing these relational wisdom skills is largely dependent on the community with whom you choose to surround yourself and your willingness to give up technological distraction. Downgrading our *digital* lives is a good first step toward upgrading our *embodied* lives, which maximizes depth of relationships and the wisdom needed for the complexities of life. Here is a sampling of what students encounter during the year related to emotional intelligence:

- Leadership and personality assessments including Meyers-Briggs, Strength Finders and Predictive Index to help students be more "self-aware"
- Practice of spiritual disciplines such as daily devotions, prayer, fasting and solitude to help students be more "God-aware"
- Community meetings and weekly community reflection to help students be more "others-aware"
- Limiting electronic technology use to eliminate distractions and build better community
- Opportunities to be challenged as a leader by serving in various capacities
- A project and presentation focused on discovering a heart idol, recognizing how the idol leads to a downward spiral and developing strategies to overcome its destructiveness

ONELIFE TECHNOLGY POLICY

A unique aspect of the OneLife program is that electronic technology is significantly reduced and limited. This includes television, computers, tablets, video game consoles, MP3 players and mobile phones. What follows is from the OneLife technology policy taken directly from the OneLife student handbook.

Electronic Devices/Tech Policy

Please know that our goal is not to restrict your life but rather to help you develop some very beneficial habits in your weekly routine. Limiting technological distractions provides an incredible opportunity to leverage your time for relationships, creativity, resting, refueling, and academics. You can't say "yes" if you don't say "no."

Cell Phones

As every student knows, according to the signed covenant,[20] students do not have access to their cell phones except on Sunday afternoon. Cell phones are to be turned in to the Resident Leaders (RL) at the end of this period each week. Occasionally, the staff may allow students to have their cell phone for safety's sake while traveling. If cell phones are not turned in on time, the only reason for not doing so must be for an emergency.

Wi-Fi

All Wi-Fi enabled devices must be registered. If you receive a new Wi- Fi enabled device during the school year you should let your RL know the day you receive it or the day you arrive back on campus with a new device. *Wi-Fi – MAC* addresses can and may be monitored by OneLife. YOU ALONE are responsible for what YOUR device views/downloads. It is vital that you "Password Protect" all of your internet enabled devices and do not share your password. Again, you alone are responsible for what your device views/downloads.

E-Free Days

20 In order to participate in the OneLife program, students are required to sign a covenant stating that they agree to abide by the OneLife way during the time in the program. The OneLife covenant includes agreeing to intentionally limit the use of electronic technology.

Monday and Wednesdays are normally our E-Free days (Electronics Free Days). No internet or electronic devices are to be used on Mondays and Wednesdays on or off campus, except for playing music from pre-made playlists in common areas, with the permission of other OneLife students and staff. This exception will be eliminated if it is abused. Additionally, the internet will be restricted on some Friday evenings beginning at 5pm.

Device Exclusivity

Just as exclusive relationships with other people can deter growth in OneLife, exclusive relationships with technology must also be avoided and will be addressed by staff and/or peers when device-fixation becomes an issue. Group engagement around electronic devices is preferred to isolated individual entertainment (online gaming or binging Netflix), but can still be detrimental to community life. When electronic devices provide the default leisure activity it deters more creative options that promote skill and character development. “Be a voice, not an echo.” (Albert Einstein)

Gaming Systems

Gaming systems must be registered with the staff and can be used only for communal gatherings, in common living areas, for a maximum of three hours on non-E-Free days.

TVs in Rooms

Televisions are not allowed in student rooms. Television and projectors are provided in common areas.

Headphones and Earbuds

In an effort to establish healthy relational habits, OneLife does not allow students to use headphones/earbuds while in public. The use of headphones/earbuds is allowed in vans only when specifically communicated. The use of headphones/earbuds during E-Free days is not

allowed. The use of headphones when privately working out/running on non-E-Free Days is allowed (any day except Monday and Wednesday).

Electronics in the Classroom

No computers, tablets, phones, or Wi-Fi enabled devices are allowed in the classroom or while teaching (whether on site or visiting a location). Contrary to initial intuition, the use of electronic devices by students in the classroom lowers retention instead of increasing it.[21] Exceptions include:

- Use of electronic devices by a student during their presentation
- Previously arranged use of electronic devices by a guest speaker or OneLife staff member
- Use of laptops/tablets to complete weekly online surveys
- Use of laptops/tablets in the classroom for class work (as scheduled by a OneLife team member)

Travel

Since travel is a great time to attend to the people around you as well as the new geography you're passing through, there may or may not be limited exceptions during travel of any sort, and, thus, will be determined and communicated by OneLife staff for each excursion.

Service Sites/Host Homes

OneLife students may be serving or staying at a host home at some points this year. Our goal is for OneLife students and staff to be a blessing, not a burden during our stay. This means serving our hosts and putting their needs above our own. Therefore, the use of personal electronic devices is not permitted while at service sites or host homes.

21 See Seungyeon Lee, et al., "The Effects of Cell Phone Use and Emotion-regulation Style on College Students' Learning," *Applied Cognitive Psychology*, April 17, 2017. Summary: "Cell phones are becoming an inevitable part of the classroom, but extant research suggests that using cell phones in the classroom impairs academic performance."

UNDERLYING ASSUMPTIONS AND AIMS OF THIS PROJECT

The OneLife policy to significantly reduce and limit electronic technology has been a part of OneLife since its inception in 2012. One of the original OneLife leaders explained it this way: the electronics policy is about "maximizing an environment where learning and life change can happen." In an attempt to maximize the learning environment, the decision to reduce electronics was based on three main assumptions: (1) electronics are a distraction; (2) electronics deter deeper community life and relationships; and (3) electronics hinder the development of communication skills, particularly in face-to-face conversation and writing.[22] Stated positively, the assumptions were: (1) limiting the use of electronics brings focus; (2) limiting the use of electronics, especially mobile devices and cell phones, fosters deeper community life; and (3) limiting the use of electronics provides opportunities for students to hone communication skills.

In addition to these assumptions, there are two key phrases that the leaders use when discussing the policy with students and parents. These phrases capture the underlying assumptions as well: (1) "OneLife is not anti-technology, but pro-community"; and (2) students should "Live with their heads up." The first phrase reminds the students of the value of community and the ways that technology can be isolating. The second phrase is a call to action, to live not with one's head down, looking at a screen, but rather, to live with one's head up, being self-aware, others aware and God aware.

The leadership of OneLife is also concerned that students learn to engage in intentional practices that help to assist in character formation and maturity. The assumption here is that paying close attention to the daily use of electronics is a "practice" that fosters growth. What

22 Another unique feature of the OneLife program is that students participate in a weekly time of letter writing. Each week, for one hour, students gather to write letters to family, friends and others who have supported during their time in the program.

follows is taken from a student survey at the conclusion of the program. The student offers her experience with limited technology for nine months. The student is worth quoting at length to illustrate the driving force behind OneLife's commitment to the policy:

> The biggest thing about this practice was that it showed me a new respect for the world that this world had lost from being all consumed in electronics. I was able to connect with my community easier and faster. I learned to be more intentional, respectful, and loving towards others. I learned to be resourceful when I had nothing to do, and I learned that I liked spending time by myself. I became more introspected in myself learning how to access myself better, and do hobbies I loved doing before electronics consumed me. Learning to live with my head up instead of down really showed me that I was missing out on a lot of fun times because I was consumed in my phone. It also showed me how I could be more intentional with my time by spending it with God instead of social media. I began to grow close to God because I learned to give him way more time throughout my day then I used to. I also got rid of qualities that social media gave me and gained more Christ-like characteristics from reading the bible and accessing myself.

The student makes several important observations connected to her experience with limited technology. She connected with community easier and faster; became more introspective; learned to live with her head up; grew closer to God and others; and gained more Christ-like characteristics. This testimony seems to indicate that the electronic technology policy is producing the results the OneLife leadership is hoping for. One testimony, however, is not enough to verify the assumptions.

The main objective of this thesis-project is to listen to students to see how they experience the electronics policy and to discover what happens to students when something they spend a considerable amount of time doing is taken away for a long period of time. More specifically, the thesis project seeks to explore the following questions:

- What can be learned from the students' experience when the use of technology is significantly reduced?
- What can be learned about the effects of limiting electronic technology on the spiritual formation and growth of students?

- What recommendations can be made to the leadership of OneLife as they consider the merits of the policy for future OneLife students?
- What recommendations can be made for parents and youth ministry leaders who are considering reducing the use of electronic technology with students?

CHAPTER 2: THEOLOGICAL FRAMEWORK

INTRODUCTION

As mentioned in chapter one, OneLife's original decision to reduce the use of electronic technology was based on intuition. The reasoning was simple: the OneLife gap year program was designed to bring focus and intentionality to a student's life during the pivotal transition of growth from adolescence to adulthood. Electronic, screen technology, especially cell phones, was assumed to be a distraction from spiritual growth and maturity. This thesis project is an attempt to indicate whether or not there is a connection between the OneLife technology policy and student growth. Before reporting and analyzing the data, however, it is also important to discuss the theological framework and philosophical assumptions behind the electronic technology policy. The following chapter will define technology, develop a theology of technology, and explore theological issues pertaining to electronic technology and spiritual growth.

DEFINING TECHNOLOGY

Sherry Turkle, in her book *Alone Together: Why We Expect More from Technology and Less from Each Other*, makes an important observation that undergirds this thesis project. She writes, "We have to love our technology enough to describe it accurately. And we have to love ourselves enough to confront technology's effects on us.[1] Before looking more deeply into the effects of modern technology on contemporary life, specifically the effects of electronic technology on adolescent, spiritual development, it is important to define technology accurately.

1 Sherry Turkle, *Alone Together: Why We Expect More from Technology and Less from Each Other* (New York, NY: Basic Books, 2017), 243.

Technology is not only electronics or machines. The English word "technology" derives from the Greek word technologia, which means a systematic treatment (logia) of an art or craft (tekhne).[2] To think of technology as an art or craft is useful for two reasons. First, a technology is not necessarily something that is new or modern. The original root meaning of the word suggests that a technology is as old as human history. Second, understanding technology as a work of art implies human activity that involves intentionality, creativity and development. A distinct trait of being human is the ability to create tools to both solve problems and enhance life.

A technology then, is simply human cultural activity using the raw materials of the earth to create artifacts and tools. According to philosopher James K. A. Smith, technology is best understood as applied knowledge to get things done. Smith explains, "Technology is as old as humanity… it is as old as culture. Technology is most basically defined as the application of knowledge in order to get something done (which is why technology is often described as *applied* science). It is as old as the human propensity—and calling—to 'make' the world. There is no human culture that is not always already technological."[3] A technology is a shovel and it is a cell phone. When analyzing the effects of modern technology on humanity, describing technology accurately will require the recognition that technology has always been a part of the human development of the world.

A Christian or biblical perspective of technology will take this definition further to include the notion of human responsibility under God. The book *Responsible Technology* defines technology as "a distinct human cultural activity in which human beings exercise freedom and

2 John Dyer, *From the Garden to the City: The Redeeming and Corrupting Power of Technology* (Grand Rapids, MI: Kregel Publications, 2011), 13.

3 James K. A. Smith, "In the Beginning Was… Technology," *Banner*, February 3, 2016, https://www.thebanner.org/features/2016/02/in-the-beginning-was-technology (accessed September 7, 2019).

responsibility in response to God by forming and transforming the natural creation, with the aid of tools and procedures, for practical ends and purposes."[4] This definition highlights an important, unique aspect of a Christian understanding of technology. When creating and utilizing technology, human beings exercise freedom and responsibility in how technology is developed. Computer scientist Derek Schuurman comments, "This definition captures a number of important points while avoiding the pitfalls of both instrumentalism and determinism. Technology is not neutral; it is value-laden cultural activity in response to God that shapes natural creation. Neither is technology autonomous; it is an area in which we exercise freedom and responsibility."[5] The implications of human freedom and responsibility is the start of a theology of technology and will be explored below. For now it is important to note that any discussion of technology from a Christian perspective will include an ethical framework.

In his book *From the Garden to the City: The Redeeming and Corrupting Power of Technology*, John Dyer helpfully shortens this definition of technology to bring focus to the dimension of human responsibility of technological development. Dyer defines technology as "the human activity of using tools to transform God's creation for practical purposes." Dyer notes that this "human activity" will happen in the context of human communities and affect others. Dyer writes, "technology involves 'using tools,' and by 'tool' we mean both physical things like wrenches, airplanes, and microchips and the methods we use to manage them. What makes a tool distinct from other cultural goods is that it is used to 'transform God's creation.'

4 Stephen V. Monsa, ed., *Responsible Technology* (Grand Rapids, MI: Eerdmans, 1986), 19.

5 Derek C. Schuurman, *Shaping a Digital World: Faith, Culture and Computer Technology* (Downers Grove, IL: Intervarsity Press, 2015), 22.

Many cultural goods like art exist for their own sake, but tools have a job: transforming the natural world."[6]

A human activity that seeks to "transform the world" has moral and ethical ramifications. Dyer is worth quoting at length, "When we use tools for transformation, we do so for some 'practical end.' This is meant to acknowledge that what we are transforming is God's, but also that humans do so for their own purposes. Sometimes those 'ends' are in line with what God would want—balancing the commands to cultivate and to keep—but sometimes people transform the world for their own selfish gain." A theology of technology is needed in order to better discern "what God would want" from human technological activity and development.

DEVELOPING A THEOLOGY OF TECHNOLOGY

Discerning God's desire for human engagement with technology requires a theology of technology. A theology of technology provides a framework for clarifying the proper *place* and proper *use* of technology in God's world. Derek Schuurman, in his article "Technology and the Biblical Story," offers important questions for this task. He writes, "But if technology is an area in which we respond to God, how do we know how we ought to respond? Of course, our ultimate guide for holy living is the Scriptures. But what do the ancient Scriptures have to say about our work with modern technology? The word 'computer' cannot be found in a Bible dictionary, and we can't simply force-fit proof-texts. The Scriptures are a lamp unto our feet, but how do we use Scripture to light our way when we are traveling along new paths?"[7] The following section will seek to answer these questions by focusing on the contours of the biblical story, especially the opening chapters of Genesis.

---

6 Dyer, *From the Garden to the City*, 66.

7 Derek Schuurman, "Technology and the Biblical Story," *Pro Rege*, September 2017, https://digitalcollections.dordt.edu/pro_rege/vol46/iss1/2 (accessed September 10, 2019).

"In the beginning, God created the heavens and earth."[8] The biblical story opens with God as the creator of all things. The first sentence in Genesis focuses the reader's attention on an important theme found throughout the entire biblical story: the story is about God and about God's creation. God is the main character and his activity and initiative move the story forward throughout human history.

The opening chapters of Genesis tells the story of how the universe and life began. But the biblical creation story is about much more than how the world started. The story makes five important theological claims that are key to understanding the entire biblical narrative and are helpful for understanding the place of technology within the biblical story.

First, technology is rooted in the goodness of creation. God's creative activity in Genesis 1 is affirmed by God as "good" six times. When God was finished with his creation, "God saw everything that he had made, and behold, it was *very* good."[9] The repeated use of the word "good" in the first chapter of the Bible orients the reader to the kind of world God has created and to God's intention for the world. Creation is good. All of creation is very good. According to the biblical story, the material world itself is not bad or evil. Craig Bartholomew and Michael Goheen explain,

> Though Christianity has often been accused of being otherworldly, it should be clear by now that the beginning of the biblical story does not encourage anyone to feel detached from, or somehow superior to, this world of space and time and matter. The Bible depicts this created, material world as the very theater of God's glory… These early chapters of Genesis are very positive about the world… it is always described as "good." Through Genesis 1 the repetition of the word "good" is a reminder that the whole creation comes from God and that in its initial state it beautifully reflects his own design and plan for it.[10]

---

8 Genesis 1:1, *English Standard Version*, hereafter "ESV."

9 Genesis 1:31, *ESV*, emphasis added.

10 Craig G. Bartholomew and Michael W. Goheen, *The Drama of Scripture: Finding Our Place in the Biblical Story* (Grand Rapids, MI: Baker Academic, 2014), 39.

This is an important distinction and implication to note, especially when considering the place of technology within the biblical story. That creation is "good," affects the way Christians approach and interact with creation. The bible affirms the goodness of creation and the created order throughout the entire biblical story. "The earth is the Lord's and everything in it," declares the Psalmist.[11] Most notably, the goodness of creation is affirmed in the Incarnation. God becomes in-fleshed in Jesus of Nazareth. God becomes part of creation in order to redeem creation. The goodness of the material world is ultimately confirmed in Jesus' bodily resurrection. The Christian hope is a resurrected body, living in a renewed earth, with God for eternity.

Denying the goodness of creation was considered a heresy in the early church known as Gnosticism. Jonathan R. Wilson explains,

> In gnosticism the world is divided into good and evil. Spirit is good; matter is evil. Matter is not fallen from a good state and therefore capable of redemption. Matter is evil from the beginning; it always has been and always will be… Our salvation depends on the escape of our spirits from the trap of matter… In neglecting the doctrine of creation, theology has contributed to the church's development of a low-grade gnostic infection that weakens many parts of the church's life.[12]

The "low-grade gnostic infection" that draws Wilson's attention the most is a weakened theology of the human body. Most notably, Wilson contends that a more robust theology of the body helps Christians navigate contemporary issues such as body image, eating disorders, substance abuse, exercise, modesty, self-harm and sexuality. Understanding bodily existence as "good" informs a Christian perspective of the body and combats the gnostic heresy that the body is "evil." Similarly, a more robust theology of technology will help Christians approach the material world

11 Psalm 24:1, *New International Version*, hereafter "NIV."

12 Jonathan R. Wilson, *God's Good World: Reclaiming the Doctrine of Creation* (Grand Rapids, MI: Baker Academic, 2013), 4-5.

with confidence, understanding that the technology itself, as a part of God's good creation, is not evil. A computer and a smartphone can be celebrated as a gift from God. The challenge is being responsible with what has been given.

Second, humans are created to be stewards of all of God's creation, including technology. On the sixth day of the creation story in Genesis, God said, "Let us make man in our image, after our likeness. And let them have dominion over the fish of the sea and over the birds of the heavens and over the livestock and over all the earth and over every creeping thing that creeps on the earth… And God blessed them. And God said to them, 'Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth.'"[13] To be created in the image of God sets humanity apart from the rest of creation.[14] In a profound way, humans are *like* God, reflecting God's image in the world.

The opening chapter of Genesis connects the image of God to the task given to humans. Humans are to have dominion over the earth, to be fruitful and multiply, to fill the earth and subdue it. Cornelius Plantinga Jr. suggests, "The Bible speaks of dominion, not in the sense of conquest, but in sense of *stewardship*."[15] According to the biblical story, humans are given authority and responsibility, to be stewards and caretakers of God's good creation.

---

13 Genesis 1:26, *ESV*

14 There is debate among biblical scholars as to what it means to be created in the image of God, or the imago dei. Some scholars focus on humanity's vocation to have dominion or to rule the earth as a representation of God. Other scholars focus on ways in which humans are set apart from animals, especially in the capacity for moral reasoning. For a helpful survey of biblical scholarship on the imago dei, see J. Richard Middtleton, *The Liberating Image: The Imago Dei in Genesis 1* (Grand Rapids, MI: Brazos Press, 2005), especially pages 14-32. For this thesis project, both definitions are helpful. Creating technology is a way to exercise dominion. Being wise and responsible in technological developments is an exercise in moral reasoning.

15 Cornelius Plantinga, Jr., *Engaging God's World: A Christian Vision of Faith, Learning, and Living* (Grand Rapids, MI: Eerdmans, 2002), 31.

That humans are to be responsible stewards of creation has implications for developing a theology of technology. Derek Schuurman explains, "As image-bearers, we have been given responsibility over creation and we are to live in loving communion with each other (Genesis 1:28). We ought to use computer technology to show love to our neighbor and in service of all kinds of life."[16] A Christian perspective and posture toward technology starts with the human responsibility to steward all things. Craig Bartholomew and Michael Goheen conclude,

> Above all things, the human caretakers are accountable to the divine Creator of the world entrusted to their care… to be human means to… respond to God and to be held accountable for that response. Thus, a better way of expressing the concept of humankind's "dominion" over creation may be to say that we are God's royal stewards, put here to develop the hidden potentials in God's creation so that the whole of it may celebrate his glory.[17]

Third, the cultural mandate involves developing the "hidden potentials in God's creation," including technology. The task given to God's image-bearers in Genesis chapter 1, to be fruitful and multiply, to fill the earth and subdue it, is known as the *cultural mandate*. This uniquely human vocation[18] is expounded in Genesis chapter 2: "Then the Lord God formed a man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being. Now the Lord God had planted a garden in the east, in Eden; and there he put the man he had formed… The Lord God took the man and put him in the Garden of Eden to work it and take care of it."[19] Another translation for "work it" and "take care of it" is to

16 Schuurman, *Shaping a Digital World*, 36.

17 Bartholomew and Goheen, *The Drama of Scripture*, 37.

18 See also Psalm 8.

19 Genesis 2:7-8, 15, *NIV*

cultivate.[20] Human beings, as God's representatives (image) on Earth, were mandated to cultivate God's good creation.

The cultural mandate involves taking the materials of creation and creating something that is useful. This is the basis for all wise scientific discoveries and technological development.[21] Andy Crouch, in his book *Culture Making: Recovering out Creative Calling*, defines culture as "what we make of the world."[22] Crouch suggests, "Culture is, first of all, the name for our relentless, restless human effort to take the world as it's given to us and make somethings else."[23] According to the biblical story, making culture, creating tools, and developing technology, is what human beings were created to do. Schuurman expands, "We are to 'fill' the earth with the products of human culture, including books, art, music, tools and—more recently—computer technology… At the time of creation, God made a world pregnant with possibilities and gave human beings the delightful task of opening up the potential of God's creation."[24]

The trajectory of the biblical story implies development and culture making. The story begins in a garden (Genesis1-3) and ends in a city (Revelation 21-22). John Dyer explains, "God created the garden not as an end point but as a starting place. Adam's job was to take the raw materials of the earth—from the wood of the trees, to the rocks on the ground, to the metal

20 Genesis 2:15, *New American Standard Bible*, hereafter "NASB."

21 The wording here is adapted from the *ESV Study Bible's* commentary on Genesis 2.

22 Andy Crouch acknowledges that he borrowed this definition of culture from Ken Myers, producer and host of Mars Hill Audio Journal.

23 Andy Crouch, *Culture Making: Recovering Our Creative Calling* (Downers Grove, IL: Intervarsity Press, 2013), 23.

24 Schuurman, *Shaping a Digital World*, 32.

buried deep within the earth—and create new things from them."[25] Human beings, created in the image of a creator, are driven by a deep, God-given desire to create, to make something of the world, to fill it with cultural activity.

The psalmist declares that the "earth is the Lord's, and everything in it."[26] This includes not only the visible aspects of creation, but also the invisible, yet-to- be-realized and discovered potential within the creation. God's good creation includes sunsets, snowcapped mountains, and ocean waves. God's good creation also includes electronic devices, computers and cell phones. Tim Challies, in his book *The Next Story: Life and Faith After the Digital Explosion*, suggests, "Our creative abilities have led us to craft all sorts of different technologies, from the most basic to the most advanced. We dream; we imagine new possibilities; we think of creative solutions. And in all of these activities we resemble our Creator. Ultimately, then, God himself is the author of all technology." Schuurman expands on this insight:

> God placed within the world the latent potential for technology and computers. This includes the possibility to etch millions of transistors onto a small silicon chip and the ability for electronic signals to propagate down wires at nearly the speed of light. There is the potential to store large amounts of data on small magnetic plates and the ability to arrange numerous light-emitting devices in rows and columns to fashion visual displays. The possibilities ordained by God are not just limited to physical devices, but also the new vistas unlocked by complex computer software.

God delights in the human activity of culture making. Humans were created to resemble their creator, to reflect God's image in the world. Psalm 8 is a reminder that humans are the crowning touch of God's creation, given a specific purpose to "rule over the work of God's

25 Dyer, *From the Garden to the City*, 46.

26 Psalm 24:1, *NIV*

hands."[27] All of creation is a gift from God, and the cultural mandate is the vocation given to humans to responsibly cultivate the creation for God's glory.

Fourth, the effects of sin touch all of creation, including technology. When Adam and Eve ate of the "forbidden fruit" and fell into sin in Genesis chapter 3, their relationship and connection to God was broken. Adam and Eve were separated from God, afraid of God, and responded by hiding from God. Their act of disobedience and "fall," not only broke their relationship with God, it also broke their relationship with the creation itself. In Genesis 3:17-19, God details the ramifications of the fall on creation:

> To Adam he said, "Because you listened to your wife and ate fruit from the tree about which I commanded you, 'You must not eat from it,' "Cursed is the ground because of you; through painful toil you will eat food from it all the days of your life. It will produce thorns and thistles for you, and you will eat the plants of the field. By the sweat of your brow you will eat your food until you return to the ground, since from it you were taken; for dust you are and to dust you will return."

In response to Adam's sin, God cursed the "ground," and thereafter cultivating the earth would require "painful toil" and overcoming "thorns and thistles."[28]

That the creation itself is under a curse, has profound implications for developing a theology of technology. The task given to God's image-bearers, to develop and cultivate the earth, did not cease after the fall into sin. To be human is to be a "culture-maker," and this innate desire still drives post-fall human activity. After the fall, however, humanity's relationship to creation has fundamentally changed. Brian Walsh and Richard Middleton, in their book *The Transforming Vision*, explain,

> The Fall affected more than humanity. Our sin has enslaved the earth. Because God had given us a unique authority over creation, our disobedience brought the entire creation under a curse. Henceforth the cultural task, human life in all its aspects, is a struggle. By ceasing to image God in our rule of the earth, we go against the grain of life; we

27 Psalm 8:5-6, *NIV*

28 Genesis 3:17-18, *NIV*

> contradict the way things were meant to be. Indeed, we contradict our very personhood. No longer do we care for creation; in fact, we begin to experience the earth as an enemy. Instead of preserving and developing creation, we destroy and exploit it. We rule the earth in disobedience.[29]

God's original intention was for humans to develop and cultivate the earth under God's wise care and guidance. By trusting God and obeying his "word," specifically not eating from the tree of the knowledge of good and evil, God and humans would live in intimate relationship and harmony with each other. The tree of the knowledge of good and evil served as a test for humans to decide whether or not they would trust God to provide for them what is needed for their task. Saying "no" to the word of God and "yes" to the voice of the serpent radically altered the human heart and the course of human history. Albert Wolters, in his book *Creation Regained* concludes,

> The effects of sin touch all of creation; no created thing is in principle untouched by the corrosive effects of the fall. Whether we look at societal structures such as the state or family, or cultural pursuits such as art or technology, or bodily functions such as sexuality or eating, or anything at all within the wide scope of creation, we discover that the good handiwork of God has been drawn into the sphere of human mutiny against God.[30]

Cultural pursuits such as technological innovation, while "good" expressions of the human capacity to develop the earth, are easily corrupted and tainted by sin. After the fall, humans find themselves left to their own devices, creating technology apart from God's guidance and unchecked by God's word. The temptation to be "like God," profoundly affects the way humans develop and use technology. Because of sin, technological developments are often self-centered and self-motivated, exploiting the earth for selfish gains. Because of sin, technological

---

29 Brian J. Walsh and J. Richard Middleton, *The Transforming Vision: Shaping a Christian World View* (Downers Grove, IL: Intervarsity Press, 1984), 70.

30 Albert M. Wolters, *Creation Regained: Biblical Basics for a Reformational Worldview* (Grand Rapids, MI: Eerdmans, 2005), 53-54.

advancements run the risk of being made because they are "possible" with little regard to the ramifications or unintended consequences. Because of sin, technology itself has the potential to become "like a god," offering superficial notions of control over nature and the ultimate harbinger of hope.

Fifth, discerning "structure and direction" is a helpful guide to think and respond "Christianly" about cultural activity, including technology. The fall into sin is not the end of the biblical story. The Bible is the story of God's own creation, the devastation visited upon that creation by sin, God's ongoing engagement with humans to redeem that which has been lost, and the eventual restoration of the entire creation in Jesus, the Messiah. The Bible describes both humans and the world as good creations that came to be distorted by disobedience. Redemption is God's loving response to a world that has fallen under the destructive curse of sin. Even though God's children disobey him, God does not abandon what he has made. God's ultimate desire is to restore broken relationships and to redeem his creation. Developing a theology of technology is to "place" technology within this narrative framework of the biblical story.

As noted above, technology is a "good" part of God's good creation; technology, as part of God's creation, is a God-given gift that humans are called to steward wisely; technology is part of the human task to develop and cultivate the earth; and technology is subject to the creation's curse and tainted by sin. Tim Challies, in his book *The Next Story,* explains the implications of this for Christian discipleship:

> When we hold these together—when we understand our mandate, remember the consequences of the fall, and recognize the power of our own sinful desires in our use of technology—we are able to think about our technologies in a distinctively Christian way. We understand that Christians have freedom and even the responsibility to engage in the development of technology and find creative applications for it in ways that further God's purposes. And yet we must still regard all technologies with a measure of suspicion,

> considering them with discernment, knowing that they easily prove to be a snare in our hearts.[31]

As Challies makes clear, Christian engagement and discernment is needed in order to be faithful stewards of God's creation. He concludes, "It is not the technology itself that is good or evil; it is the human application of that technology… Discerning the intended use of a technology, examining our own use of it, and reflecting on these purposes in light of Scripture disciplines our technological discernment."[32]

Theologian and philosopher Albert Wolters, in his book *Creation Regained*, developed a theological schema to help Christians think about all cultural activity, including technology, in a distinctively Christian way. The theological framework involves discerning the difference between *structure* and *direction*. Structure refers to the order of creation. It is anchored in the law of creation, the creational decree of God that constitutes the nature of different kinds of creatures. Philosophical traditions of the West have often referred to "structure" by using such words as *substance*, *essence*, and *nature*. Direction involves two tendencies moving either for or against God. Anything in creation can be directed either toward or away from God's intentions. Direction also designates the order of sin and redemption. It refers to the distortion or perversion of creation through the fall on the one hand and the redemption and restoration of creation (in Christ) on the other. [33]

---

31 Tim Challies, *The Next Story: Life and Faith After the Digital Explosion* (Grand Rapids, MI: Zondervan, 2011), 25.

32 Challies, *The Next Story*, 25.

33 Wolters use of the word "law" when referring to creation is useful for developing a theology of technology. He makes distinction between "laws of nature" and what he calls "creational norms." Wolters writes, "We are all familiar with the laws of nature, the regular order in the realm of physical things, of plants and of animals. These include the laws of gravity, motion, thermodynamics, photosynthesis, and heredity—all the 'natural laws' discovered by physics, chemistry, biology, and the other 'natural sciences.' We are not so familiar with… God's laws for culture and society, which we call norms. To be sure, we recognize norms for interpersonal relationships, but we are hesitant about any norms for societal institutions as such, or for something so mundane as agriculture. Yet both Scripture and experience teach us that God's will must be discerned here too, that the Creator

The strength of Wolters' use of structure and direction is that it applies not just to the human condition but to all aspects of human cultural activity as well. According to the biblical story, humans are created "good," but fallen and broken, and in need of redemption. Human cultural activity is also part of God's "good" creation, but fallen and broken, in need of redemption as well. Wolters explains,

> This double direction applies not only to individual human beings but also to such cultural phenomena as technology, art, and scholarship, to such societal institutions as labor unions, schools, and corporations, and to such human functions as emotionality, sexuality, and rationality. To the degree that these realities fail to live up to God's creational design for them, they are misdirected, abnormal, distorted. To the degree that they still conform to God's design, they are in the grip of a countervailing force that curbs or counteracts the distortion. Direction therefore always involves two tendencies moving either for or against God.[34]

This is summarized well in another, shorter quote by Wolters, "What was *formed* in creation has been historically *deformed* by sin and must be *reformed* in Christ." This applies to humanity, as part of God's creation, but it also applies to what humans have "done" with creation, especially humanities technological development and innovation.

Derek Schuurman uses Wolter's theological formula of structure and direction in his work as a computer scientist. According to Schuurman, structure and direction helps to clarify a biblical approach to understanding technology. It also helps Christians ask better questions about the use of technology. Schuurman writes,

> One can say that technology has both a creational *structure* as well as a *direction*. Creational *structures* endure, but they can be *directed* either in obedience to God's intentions or towards more disobedient uses. The common question of whether technology is good or bad is a false dichotomy. Technology is, in fact, part of God's good creation, but the important question is this: in what direction is it pointed? Do we direct

---

is sovereign over the state as much as he is over energy exchanges. God's statutes and ordinances are over everything, certainly not excluding the wide domain of human affairs." See Wolters, *Creation Regained,* 16.

34 Wolters, *Creation Regained,* 59.

> technology towards uses that make us more like the people God intends us to be, and closer to the kind of world he wants us to shape, or towards disobedience?[35]

Schuurman provides examples for applying structure and direction to computer technology. The internet can be useful for providing and communicating helpful information, but it also includes destructive websites such as gambling and pornography. Email and social networks can enhance communication, but it can also lead to less face-to-face communication and human contact. Software can provide helpful applications to solve problems but malicious software causes great harm.[36] Schuurman concludes, "Nevertheless, the structure of things in creation continues despite their misdirection… misdirected technology reminds us of the reality of the fall and how things can be distorted or perverted."[37]

Applying the theological categories of structure and direction to technology has been important in the development of OneLife's technology policy for two reasons. First, utilizing structure and direction avoids a legalistic approach to technology. As noted above, the leadership of OneLife is not anti-technology and does not view technology as evil. Technology is a good part of God's creation (structure) and can be celebrated and enjoyed. The concern of OneLife's leadership is the use or overuse (direction) of some electronic technology. A "break" from electronic technology gives students an opportunity to keep technology in its proper place. Second, applying structure and direction to technology helps students develop the life-long practice of Christian discernment. Discernment is especially needed in aspects of life and culture that are pervasive and potentially idolatrous. Not only does OneLife leadership believe that discernment is a life-long practice that needs to be developed, but it is also a mission of the

35 Schuurman, "Technology and the Biblical Story," *Pro Rege*.

36 Schuurman, *Shaping a Digital World*, 55-56.

37 Schuurman, *Shaping a Digital World*, 56.

church. Albert Wolters and Michael Goheen explain, "In every cultural product, institution, and custom is something of the good of God's creational structure. At the same time all of it, to some degree, is misdirected by a shared cultural idolatry. The mission of God's people is to discern and embrace the good creational insights and structure, and at the same time to reject and subvert the idolatrous distortion."[38] Limiting the use of electronic technology for nine months provides an opportunity for students to fulfill their calling by developing life-long practices of discernment and reflecting deeply on how electronic devices effects their spiritual growth.

THEOLOGICAL ISSUES PERTAINING TO LIMITING ELECTRONIC TECHNOLOGY AND SPIRITUAL GROWTH

The focus of OneLife is on the spiritual growth of young people as they transition from adolescence to adulthood. As noted above in chapter one, the working assumption of OneLife's leadership was that limiting the use of electronic technology would maximize the growth potential of each student during the nine-month gap year program. There are many positive benefits to electronic technologies such as smartphones, tablets and computers. These devices along with the Internet allow people to stay connected to each other and even build community. The World Wide Web provides tremendous access to important and useful information. It is not the electronic devices, alone, that are a problem or "evil." Rather, the issue is in the way young people *use* these devices. In a relatively short period of time[39], the use of electronic technologies

38 Wolters, *Creation Regained*, 137.

39 Cell phone ownership has drastically increased in a short period of time. Pew Research Center started tracking cell phone ownership in 2002. In 2002, 68% of Americans owned a cell phone. As of February, 2019, 96% of Americans own a cell phone. Pew began tracking smartphone ownership in 2011. In 2011, 35% of Americans owned a smartphone. As of February, 2019, 81% of Americans own a smartphone. See "Mobile Fact Sheet," Pew Research Center, https://www.pewinternet.org/fact-sheet/mobile/ (accessed September 10, 2019). Psychologist Jean Twenge observed, "Around 2012, I noticed abrupt shifts in teen behaviors and emotional states. The gentle slopes of the line graphs became steep mountains and sheer cliffs, and many of the distinctive characteristics of the Millennial generation began to disappear. In all my analyses of generational data—some reaching back to the 1930s—I had never seen anything like it. At first, I presumed these might be blips, but the trends persisted, across several years

and devices have become a way of life, affecting daily routines, relational expectations and even the physical development of the brain. Researchers are continually investigating how the pervasive use of electronic devices is affecting young people. The findings of current research will be explored in the next chapter. Before reviewing the literature, however, it is worth noting three ways in which limiting the use of electronic devices can promote spiritual growth.

First, limiting the use of electronic devices can allow students to discern whether or not they have control over their usage of electronic devices. Do young people own their technology or does their technology own them? The ubiquitous nature of technology makes it difficult to imagine life without a smartphone, tablet or computer. The things people do the most are often reflected upon the least. Young people today, especially, have had very little say in whether or not they will adopt new technologies. The new technologies were simply handed to them at a young age.

Computer Scientist Cal Newport recommends a thirty day "declutter" from digital devices to simply think more critically about their value. Newport writes, "Our current unease with new technologies is not really about whether or not they're useful. It's instead about autonomy. We signed up for these services and bought these devices for minor reasons—to look up friends' relationship statuses or eliminate the need to carry a separate iPod and phone—and then found ourselves, years later, increasingly dominated by their influence, allowing them to

---

and a series of national surveys. The changes weren't just in degree, but in kind. The biggest difference between the Millennials and their predecessors was in how they viewed the world; teens today differ from the Millennials not just in their views but in how they spend their time. The experiences they have every day are radically different from those of the generation that came of age just a few years before them. What happened in 2012 to cause such dramatic shifts in behavior?... It was exactly the moment when the proportion of Americans who owned a smartphone surpassed 50 percent." See Jean Twenge, "Have Smartphones Destroyed a Generation?" *The Atlantic*, September 2017, https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/ (accessed September 10, 2019).

control more and more of how we spend our time, how we feel, and how we behave."[40] And the behavior, especially for young people, has the potential to become addictive. Adam Alter, in his book *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked*, reports,

> Addictions continue to grow with technological innovation and social change. One recent study suggested that up to 40 percent of the population suffers from some form of Internet-based addiction, whether to email, gaming, or porn. Another found that 48 percent of its sample of U.S. university students were "Internet addicts," and another 40 percent were borderline or potential addicts. When asked to discuss their interactions with the Internet, most of the students gravitated toward negative consequences, explaining that their work, relationships, and family lives were poorer because they spent too much time online.[41]

There is much debate about whether or not electronic device usage is truly addictive. But it is clear that the use of electronic devices, especially the use of smartphones, has drastically changed the cultural landscape and teen behavior. Seminary professor Arthur Boers warns, "When we allow devices and machines to reside at the center of our lives, we displace values and practices that once enriched the quality of how we live. We end up serving our gadgets instead of using them as tools to support our priorities. Technology itself becomes the center and purpose of how we live."[42]

Giving young adults a break from using electronic devices, can, at the very least, help young people evaluate what is truly at the center of their lives. It allows young adults to put

---

40 Cal Newport, *Digital Minimalism: Choosing a Focused Life in a Noisy World* (New York, NY: Penguin, 2019), 24.

41 Adam L. Alter, *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked* (New York, NY: Penguin Books, 2018), 26.

42 Arthur Boers, *Living into Focus: Choosing What Matters in an Age of Distractions*, (Grand Rapids, MI: Brazos Press), 19.

technology in its proper place.[43] Philosopher James K. A. Smith concludes, "Christian discipleship that is going to be intentional and formative needs to be attentive to all the rival formations we are immersed in."[44] The overuse of electronic devices shapes the hearts and minds of young people in profound ways. Limiting the use of electronic devices for nine-months can give young people new eyes to see how their devices affect their spiritual growth, and can help them develop new practices that are more congruent with their Christian values.

Second, limiting the use of electronic devices can provide an opportunity for students to practice reflection and solitude, essential elements of spiritual growth. The goal of Christian discipleship is to become more and more like Jesus. Putting on the character or Christ, being formed spiritually into Christlikeness, does not happen by accident, but requires careful attention to the kind of person one is becoming. N.T. Wright explains, "The aim of the Christian life in the present time—the goal you are meant to be aiming at once you have come to faith… is the life of fully formed, fully flourishing Christian character."[45] Forming Christian character takes time and practice. Jesus's own life provides a model for the kinds of practices required to nurture an intimate relationship with God. Jesus meditated deeply on the word of God, listened attentively to the voice of God and prayed earnestly for the will of God to be done on earth as it is in heaven. For followers of Jesus to model this behavior requires intentional time of self-reflection and solitude.

---

43 Andy Crouch, *The Tech-Wise Family: Everyday Steps for Putting Technology in Its Proper Place* (Grand Rapids, MI: Baker Books, 2017), 20.

44 James K. A. Smith, *You Are What You Love: The Spiritual Power of Habit* (Grand Rapids, MI: Brazos Press), 38.

45 N. T. Wright, *After You Believe: Why Christian Character Matters* (New York, NY: HarperOne, 2012), 32.

Creating space for reflection and solitude has increasingly become a challenge in the digital age. The amount of time spent on electronic devices each day and the sheer volume of daily input and output is mesmerizing. It is estimated that the average person checks their phone every 4.3 minutes of their waking lives. The average output of email and social-media text is estimated at 3.6 trillion words typed every day.[46] Continually checking devices and processing information is exhausting. Neurological research has revealed that, put simply, the brain is a muscle and needs to rest in order to function properly. When the brain is resting and free from external inputs it can clarify hard problems, regulate emotions, build moral courage, and strengthen relationships. What is needed is solitude. Sherry Turkle explains,

> Developmental psychology has long made the case for the importance of solitude. And now so does neuroscience. It is only when we are alone with our thoughts—not reacting to external stimuli—that we engage that part of the brains's basic infrastructure devoted to building up a sense of our stable autobiographical past. This is the "default mode network." So, without solitude, we can't construct a stable sense of self. Yet children who grow up digital have always had something external to respond to. When they go online, their minds are not wandering but rather captured and divided… When we let our minds wander, we set our brains free. Our brains are most productive when there is no demand that they be reactive.[47]

Giving young people the opportunity to practice the habits of reflection and solitude not only helps them be more stable but also prepares them for healthy and successful adulthood. Maggie Jackson, in her book *Distracted: The Erosion of Attention and the Coming Dark Age,* writes that young people could potentially be at an advantage if they simply learn to focus and reflect. "To value a split-focus life augmented by the machine is above all to squeeze out potential time and space for reflection, which is the real sword in the stone needed to thrive in a complex, ever-

46 Tony Reinke, *12 Ways Your Phone Is Changing You* (Wheaton, IL: Crossway, 2017), 145.

47 Sherry Turkle, *Reclaiming Conversation: The Power of Talk in a Digital Age* (New York, NY: Penguin, 2016), 61-62.

shifting new world. To breed children for a world of split focus is to raise generations who will have ceded cognitive control of their days."[48]

Young people are growing up in a world of what Cal Newport calls solitude deprivation, "a state in which you spend close to zero time alone with your own thoughts and free from input from other minds."[49] Limiting the use of electronic devices can give young people a much needed break from compulsive behaviors and information overload. It can also help young adults grow spiritually by engaging in the practices of self-reflection and solitude. Even without digital technology, the adolescent years often include feelings of anxiety and loneliness. For followers of Jesus, practicing solitude, ironically can remind young people that they are not alone. Tricia McCary Rhodes, in her book *The Wired Soul: Finding Spiritual Balance in a Hyperconnected Age*, concludes, "As we pull away from life's mesmerizing minutia and begin to envision Christ as our ever-present companion, his whispers of love become beams of light, warming the caverns of our hearts from the inside out. This is the fruit it of reflection."[50]

Third, limiting the use of electronic devices can lead to deeper friendships, an indispensable element of spiritual growth. People were created to be in personal, intimate relationships with others. The opening chapters of Genesis present God and people as relational beings. There are two aspects of the creation account worth noting. First, when the creation of human beings is described in Genesis 1:26-27, there is a change in the pronoun used for God:

> Then God said, 'Let us make human beings in our image, to be like us. They will reign over the fish in the sea, the birds in the sky, the livestock, all the wild animals on the earth, and the small animals that scurry along the ground.' **27**So God created human

48 Maggie Jackson. *Distracted: The Erosion of Attention and the Coming Dark Age* (Amherst, NY: Prometheus Books, 2009), 92.

49 Cal Newport, *Digital Minimalism*, 103.

50 Tricia McCary Rhodes, PhD, *The Wired Soul: Finding Spiritual Balance in a Hyperconnected Age* (Colorado Springs, CO: NavPress, 2016), 178.

> beings in his own image. In the image of God he created them; male and female he created them.[51]

Humans were created in the image of an "us." To be human, is to be relational. Being in relationship with others is an expression of what it means to be human. Biblical counselor Jonathan Holmes, in his book *The Company We Keep: In Search of Biblical Friendship*, explains,

> This surprising 'us,' right there near the start of Scripture, is only the first of many indications that our creator exists himself as one God in three persons. Indeed, the eternal Trinity is the most fundamental expression of community and relationship. Therefore, one of the simplest yet most profound aspects of mankind being made in God's image is that we were designed to live in relationships.[52]

Second, in addition to the "surprising" shift in pronoun to describe God in Genesis 1:26, there is also an intentionally abrupt change in phraseology to describe the creation in Genesis 2:18: "Then the Lord God said, 'It is not good for the man to be alone. I will make a helper who is just right for him.'" Before Genesis 2:18, the phrase "it is good" was used to describe the creation seven times. There was a musical-like cadence to the refrain, repeated to form a pattern in the reader's mind. God creates and "it is good." Genesis 2:18, however, alerts the reader to a "problem" in creation. Something is *not* good. It is *not* good for "man to be alone." Holmes again,

> The "problem" of Adam being alone… did not reflect a failure either in Adam's divine design or in his performance as a person. It lay in the limited nature of humanity, that none of us can be a community in ourselves the way God is a community in himself. Adam *needed* community in order to better image the God who *is* community. He was created to pursue, develop, and maintain human relationships as an integral part of being made in the image of the triune God.[53]

---

51 Genesis 1:26-27, *New Living Translation*.

52 Jonathan Holmes, *The Company We Keep: In Search of Biblical Friendship* (Minneapolis, MN: Cruciform Press, 2014), 19.

53 Holmes, *The Company We Keep*, 20.

Human beings are relational creatures, by design. Created in the image of an "us," humans reflect their creator by developing intimate, harmonious relationships with others.

The use of electronic technology can make it difficult for young people to develop meaningful relationships. Although electronic devices such as smartphones and social media sites such as Facebook and Instagram provide opportunities to stay connected with others, the connection is not always the same thing as a real relationship. Meaningful relationships require time to develop and face-to-face interactions. Psychologist Jean Twenge's research makes a connection between the time young people spend on screens and the amount of time young people spend with friends. The number of people who get together with friends everyday has been cut in half in the last fifteen years.

Today's college students are spending four hours less a week socializing. According to Twenge, the current generation is seeing their friends in person an hour less a day than previous generations. As the amount of time spent on screens continues to rise, the amount of time spent in social interaction continues to decline. Twenge concludes, "An hour a day less spent with friends is an hour a day less spent building social skills, negotiating relationships, and navigating emotions… the time has not been replaced with homework; it's been replaced with screen time."[54] Building social skills, negotiating relationships and navigating emotions are needed in order to transition to healthy adulthood. Developing relational skills takes time and practice. According to psychologist Sherry Turkle, relational growth is being stunted by the overuse of electronic devices. Turkle writes,

> …computers offer the illusion of companionship without the demands of friendship and, as the programs got really good, the illusion of friendship without the demands of intimacy. Because, face-to-face, people ask for things that computers never do. With

54 Jean M. Twenge, *iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy—and Completely Unprepared for Adulthood—and What That Means for the Rest of Us* (New York, NY: Atria Books, 2018), 71-72.

> people, things go best if you pay close attention and know how to put yourself in someone else's shoes. Real people demand responses to what they are feeling… Time with people teaches children how to be in a relationship, beginning with the ability to have a conversation… Conversation is on the path toward the experience of intimacy, community, and communion.[55]

Both Twenge's and Turkle's research reveal a relational deficit among many young adults. Both researchers advocate for deeper relationships through more face-to-face interaction and conversation. Both conclusions are affirmed by the biblical story and the biblical account of the human person.

Humans were designed by God for intimate relationships with God and others. In Genesis 3, however, when Adam and Eve realized their sin and disobedience, their first response was to hide from God and each other. Intimacy was lost. Love and security was replaced by fear and shame. To borrow again from Wolters, the structure of relationships is good. The direction relationships take is away from their intended purpose. God intended relationships to be for intimacy, flourishing, and love. Sin distorts relationships by filling them with suspicion, control, and lust. Humanity's propensity toward sin and selfishness continues to make meaningful relationships difficult. Cultivating genuine relationships is not easy in a broken world. Pursuing relationships takes time and focused attention. Forging relationships requires risk, vulnerability and sacrifice. Humans are relational beings by design, but because relationships are often difficult in a fallen world, there is a temptation for humans to seek out relational substitutes. In other words, humans desire the benefits of relationships without the hard work they require.

The difficulty of forming relationships is not a new problem, but contemporary communication technologies have created new challenges in this regard. It is now possible to maintain a relational connection with someone without being present and face-to-face with the

55 Turkle, *Reclaiming Conversation,* 7.

person. It is now possible to start a relationship with someone who is thousands of miles away, whom a person may never see. For young people, especially, the use of electronic technology makes it easier to be "relational" without having a face-to-face relationship. Jonathan Holmes explains,

> …every human being was built for intimacy and relationship, yet through sin we have a penchant for looking for these things in all the wrong places. Email and Facebook and Twitter and all the rest, which promised to make relationships easier, often function as relational substitutes. The inherent promises of Facebook—that you can be connected to everyone, be friends with everyone—quickly leave their users disenchanted and even depressed… We want friendships on our timetable, our terms of agreement. We do not want friendships that would move us out of our comfort zone.[56]

Limiting the use of communication technologies and social media applications provides a valuable opportunity for young people to grow deeper relationships and deeper relationships helps them to grow spiritually. A guided break from social media can encourage young people to evaluate their current friendships in light of a biblical understanding of relationships. Are they using these communication tools as relational substitutes? Are they looking for relationships in the "right" places? Are their online relationships leaving them disenchanted and depressed? What does good, biblical relationships look like? A simple pause in the use of social media creates space to ask questions such as these, reflect on current relational practices and make adjustments where needed. Cal Newport observes, "The idea that it's valuable to maintain vast numbers of weak-tie social connections is largely an invention of the past decade or so… Humans have maintained rich and fulfilling social lives for our entire history without needing the ability to send a few bits of information each month to people we knew briefly during high

56 Holmes, *The Company We Keep*, 33-34.

school."[57] Stronger social, in person, connections lead to richer and more fulfilling lives.[58] Newport again, "The key issue is that using social media tends to take people away from the real-world socializing that's massively more valuable… the more you use social media, the less time you tend to devote to offline interaction, and therefore the worse the value deficit becomes—leaving the heaviest social media users much more likely to be lonely and miserable. The small boosts you receive from posting… can't come close to compensating for the large loss experienced by no longer spending real-world time with [a friend]."[59]

Face-to-face, social interaction does more for young people than just helping them build social skills. It can help them grow spiritually and become more like Christ. Once again, because of humanity's sinful nature, there will always be a tendency to approach relationships for selfish gain, control and comfort. Building stronger, more fulfilling relationships takes time and is hard work. It requires an honest, continual, self-evaluation of motives of the heart. It requires receiving genuine feedback from others. Intimate relationships are built in the awkwardness of silence, in the confession of sin, in asking for forgiveness. Tim Challies writes, "God never calls us to a life of ease, a life in which we maintain control and do things on our own terms. He puts us in marriage relationships, in friendships, in church communities, for his own reasons; he puts us in such relationships to teach us how to love one another and more and more resemble him in his great love. Could it be that our desire for control is short-circuiting the process of change and transformation God wants us to experience through the mess of real-world, flesh-and-blood,

57 Newport, *Digital Minimalism*, 155.

58 Jean Twenge comments on recent research related to screen time and happiness among young people. She notes, "Those who spend more time with their friends in person are 20% *less* likely to be unhappy. If you are going to give advice for a happy life based on [current research], it would be straightforward: put down the phone, turn off the computer or iPad, and do something—anything—that does not involve a screen." See Twenge, *iGen*, 78.

59 Newport, *Digital Minimalism*, 141.

face-to-face relationships?"[60] Communication technologies and social media can disguise relational deficiencies, allowing young people to give the appearance of a strong social life, while maintaining control and avoiding the "messiness" of face-to-face relationships. But it is often in the "mess" of "real-world" relationships that leads to spiritual transformation.

To be clear, it *is* possible to grow a friendship by being apart or by not being present for periods of time. For those shaped by the biblical story, however, it is not preferred.[61] The Bible tells the story of a personal, creator God who desires a personal, intimate relationship with his creation. The God of the Bible goes to great lengths to pursue his people and redeem them, healing them from their sin and bringing them back into right relationship with God and each other. The incarnation and the bodily resurrection of Jesus, hallmarks of the Christian faith, affirm bodily life and personal presence. God sent a person to redeem people. Jesus is the face-to-face God. His ministry was marked by being present with people. Followers of Jesus carry on the ministry of Jesus by favoring embodied life, embodying the practices of Jesus. Tony Reinke remarks,

> In our bodies, we carry around the death of Jesus, so we can lay down our lives for our brothers and sisters in Christ. Every unseen spiritual reality in the Christian life, and every physical practice in the church, is rooted in the physical realities of our Savior—that he was and is God incarnate… The modern-day mantra we hear so often—"I will follow Christ, but don't bother me with organized religion"—is symptomatic of the disembodied assumptions of the digital age. In reality, the Christian life could not be more embodied. To ignore all these facts, and to prioritize our disembodied existence online, is nothing short of "conniving at dehumanization."[62]

---

60 Challies, *The Next Story*, 112.

61 Jonathan Dyer provides an obscure, but helpful example in Scripture of the preference of face to face interaction. Dyer quotes two passages from John's writings. "Though I have much to write to you, I would rather not use paper and ink. Instead I hope to come to you and talk face to face, so that our joy may be complete" (2 John 12). "I had much to write to you, but I would rather not write with pen and ink. I hope to see you soon, and we will talk face to face" (3 John 12-13.) See Dyer, *From the Garden to the City*, 30.

62 Reinke, *12 Ways Your Phone is Changing You*, 62.

Created in the image of a relational God, humans are designed to flourish in relationship with each other. The Christian hope is not a disembodied bliss in a heavenly realm, but a resurrected body, with God and God's people in an eternal city. Limiting the use of electronic devices has the potential to help young people prioritize embodied life, develop relational skills and practice the presence of God.

CONCLUSION

Technological development and advancement is part of God's good creation. According to the biblical story, to be human is to cultivate the earth, to make something of the world, to use God given abilities to explore and unlock the potential embedded in God's creation. Technology, itself, is not bad or evil. Fallen humanity, however, often develops and uses technology in ways that go against God's intentions and desires. OneLife's policy to limit the use of electronic technology is not about being anti-technology but is rather about being pro-reflection, pro-conversation, and pro-community. The use of electronic technology can create many challenges to spiritual growth. Tim Challies explains, "The challenge facing us is clear. We need to relearn how to think, and we need to discipline ourselves to think deeply, conquering the distractions in our lives so that we can *live* deeply. We must rediscover how to be truly thoughtful Christians, as we seek to live with virtue in the aftermath of the digital explosion."[63] The next chapter will explore the relevant research on why and how electronic technology has become such a challenge and distraction from living deeply and virtuously.

63 Challies, *The Next Story*, 117.

CHAPTER 3: LITERATURE REVIEW

INTRODUCTION

The main focus of this thesis project is to examine how the overuse of technology, especially digital and mobile devices, affects the spiritual and character formation of young adults. Technology is pervasive. It is difficult for many American teenagers to imagine life without access to the Internet or the daily use of a smart phone. The seemingly inescapable and ubiquitous nature of technology can make it difficult to ask important questions about its use. There is a tendency to think less about things that are *used* the most. The following books are concerned about what technology *does* to people and culture. There is much to be said and has been written concerning what present-day society has *gained* from technological advancements: modern medicine; cross cultural and continental connections; increased mobility; and access to information. This chapter, however, is more concerned with what has been *lost* as a result of increased technological usage. The following works address important questions related to what technology is doing to culture, relationships, the brain and emerging adulthood.

TECHNOLOGY AND CULTURE

Technopoly: The Surrender of Culture to Technology by Neil Postman

This literature review begins with a book by the late Neil Postman (1931-2003) for two reasons. First, as a professor, Postman introduced the term and dedicated his life to "media ecology." Media ecology is the study of media, technology and communication and how they affect human environments. Postman's research and teaching was an attempt to discern the deeper issues and changes that technological advancements create in society. Second, as a cultural critic, Postman was outspoken regarding his concern for adopting technologies without asking how those technologies will change people and culture. He was not against technological

advancements, per se, but he was reluctant to accept technological innovations in the name of "progress."

The primary focus of Postman's early work, for example, was on media and television. As a media ecologist, his concerns were not as much about the programs that were *on* television, but rather he desired to pay more attention to what having a television *did* to households, relationships, conversation and public discourse. Media ecologists ask questions such as: how does having a TV in the home affect parent/child relationships?; how does TV influence presidential debates and elections?; and what does the amount of "screen time" do to the attention spans of children? By asking questions like these, Postman's work proved to be ahead of his time and relevant to current conversations about technology.

During the latter part of his career, in fact, Postman directed his expertise as a media ecologist toward the "monopolizing" effects of technology itself. *Technopoly: The Surrender of Culture to Technology* was published in 1992, three years before the Internet was made available to the public and many years before the wide-spread use of smart phones and social media. The main thrust of the book is about "the tendency in America to turn over to technology sovereignty, command and control to all of our social institutions." In other words, according to Postman, "America has developed a new religion… the religion is America's faith that human progress and technological innovation are the same thing and that paradise can be achieved through greater and greater commitment to technology."[1] Postman proposed that inherent in American culture was the propensity to simply adopt new technologies because they were new and would somehow lead to a better world. Postman was most concerned about computers. He writes, "What is clear is that, to date, computer technology has served to strengthen

1 Neil Postman, "Book TV: Technopoly," *YouTube*, uploaded by C-SPAN Book TV, October 19, 2009, https://www.youtube.com/watch?v=KbAPtGYiRvg (accessed September 11, 2019).

Technology's hold, to make people believe that technological innovation is synonymous with human progress."[2] His fear was not necessarily with a computer itself, but that computers would radically alter human activity and interaction.

Postman was not without his critics, to be sure. Many accused him of being anti-technology and failing to give adequate attention to the positive benefits that technology can bring. But his work in the development of media ecology is still valuable and germane to this project because of the tools it provides for evaluating the cultural gains and loses with every new technology. Postman forces people to ask better, bigger questions about technology. He explains, "Once a technology is admitted, it plays out its hand; it does what it is designed to do. Our task is to understand what that design is—that is to say, when we admit a new technology to the culture, we must do so with our eyes wide open."[3]

OneLife's policy of reducing the amount of time given to electronic technology was developed because of the types of questions Postman was asking. As stated above, OneLife is not anti-technology, but rather seeks to provide an opportunity for students to consider what technology is *doing* to them. By taking a break from electronic technology, students become less dependent on computers and more dependent on each other. Postman concludes, "Technopoly also encourages insensitivity to what skills may be lost in the acquisition of new ones. It is important to remember what can be done without computers, and it is also important to remind ourselves of what may be lost when we do use them."[4]

TECHNOLOGY AND RELATIONSHIPS

2 Neil Postman, *Technopoly: The Surrender of Culture to Technology*, (New York, NY: Vintage Books, 1993), 117.

3 Postman, *Technopoly*, 7.

4 Postman, *Technopoly*, 120.

Alone Together: Why We Expect More from Technology and Less from Each Other and *Reclaiming Conversation: The Power of Talk in a Digital Age* by Sherry Turkle

Postman wanted people to approach all technological innovation and "advancement" with "eyes wide open," looking deeper at how technology changes culture. Sherry Turkle, a professor of Social Studies of Science and Technology at the Massachusetts Institute of Technology (MIT), has spent over thirty years studying the psychology of relationships with technology and people. MIT is a selective and prestigious university, known for technological innovation and inventions. Turkle writes about her experiencing being a cautious voice in such a setting: "While my computer science colleagues were immersed in getting computers to do ingenious things, I had other concerns. How were computers changing us as people? My colleagues often objected, insisting that computers were 'just tools.' But I was certain that the 'just' in that sentence was deceiving. We are shaped by our tools. And now, the computer, a machine on the border of becoming a mind, was changing and shaping us."[5]

According Turkle, one of the most prevalent ways in which a "machine was becoming a mind" was in robotics. To Turkle's dismay, more and more people were looking to technology for friendship and intimacy. Although much of her 2011 book, *Alone Together: Why We Expect More from Technology and Less from Each Other*, focuses on people's interactions with robots in particular, it reveals much about people's expectations with technology in general. Turkle is not convinced that a machine can provide what humans need from each other. She writes, "Technology is seductive when what it offers meets our human vulnerabilities. And as it turns out, we are very vulnerable indeed. We are lonely but fearful of intimacy. Digital connections and the sociable robot may offer the illusion of companionship without the demands of

5 Sherry Turkle, *Alone Together: Why We Expect More From Technology and Less from Each Other*, (New York, NY: Basic Books, 2012), x.

friendship. Our networked life allows us to hide from each other, even as we are tethered to each other. We'd rather text than talk."[6]

The conclusions of her study of the "networked life" and how it left people feeling alone even when together, caused her to ask deeper questions about intimacy and solitude. How is true intimacy developed? Is there a difference between face-to-face interaction and communicating through a phone or computer? Why is solitude a challenge? Why do so many people have a difficult time being by themselves?

Asking these questions lead to her 2015 book *Reclaiming Conversation: The Power of Talk in a Digital Age*. In this book, Turkle makes a strong case for the value of face-to-face interaction and the need for solitude. In-person interactions, especially uninterrupted conversations, develop empathy and intimacy. People read each others emotions, learn to listen, and ask questions. Her research reveals how "texting rather than talking" makes it difficult to cultivate deeper relationships. Turkle is not only concerned about how one relates to another, but she is also interested in how a person relates to him or herself. She writes, "Technology enchants. It makes us forget what we know about life. We slip into thinking that always being connected is going to make us less lonely. But we are at risk because it is actually the reverse. If we are unable to be alone, we will be more lonely. And if we don't teach our children to be alone, they will only know how to be lonely."[7]

There are three aspects of Turkle's work that have proven to be particularly helpful for OneLife's work with students. First, similar to Postman, Turkle is not anti-technology, but she is not afraid to name the potential dangers associated with technological developments. She writes,

6 Turkle, *Alone Together*, 1.

7 Turkle, *Reclaiming Conversation*, 23.

"We have to love our technology enough to describe it accurately. And we have to love ourselves enough to confront technology's true effects on us."[8] OneLife offers a place for students to be honest about how technology affects student's relationship with God and each other. Here Turkle helps OneLife see deeper issues that students face, especially high levels of anxiety and loneliness.

Second, in *Reclaiming Conversation*, Turkle highlights a recent study revealing a 40 percent decline in the markers of empathy among today's college students.[9] This trend is linked to the rise in the presence of digital communications. Another study reveals that children who put away their devices for five days at a camp began to recover their empathic capacity. Turkle's experience observing campers is worth quoting at length:

> I saw how easy it was for them to appreciate—as though for the first time—the value of conversation, with themselves and others. The campers I met spoke about solitude and empathy. Campers said they were more interested in their summer friends than in their friends at school. They thought the difference was that at home they talk with their friends about what's on their phone; at camp, they talk to each other about what's on their minds. And as I participated in nightly cabin chats, campers remarked on their deepening relationships with counselors. The camp counselors were offering campers something close to exotic: undivided attention.[10]

Turkle gives weight to OneLife's motivation to limit technology among both students and staff.

Third, according to Turkle, what students need most to mature into healthy adulthood are mentors. She writes, "Studies of mentoring show that what makes a difference, what can change the life of a student, is the presence of one strong figure who shows an interest, who, that student would say, 'gets me.' You need a conversation for that."[11] Forging relationships that matter and

---

8 Turkle, *Alone Together*, 242.

9 Turkle, *Reclaiming Conversation*, 21.

10 Turkle, *Reclaiming Conversation*, 317-318.

11 Turkle, *Reclaiming Conversation*, 248.

make a difference require being intentional in when and how technology is used. Turkle makes it clear that technology, when used excessively, hinders meaningful relationships.

TECHNOLOGY AND THE BRAIN

The Shallows: What the Internet is Doing to Our Brains by Nicholas Carr and *The Internet of Us: Knowing More and Understanding Less in the Age of Big Data* by Michael P. Lynch

Postman argued that technology changes culture and that people must be willing to wrestle with the far-reaching implications of a technological society. Turkle maintains that technology changes relationships, especially in how people relate to themselves and how they communicate with each other. Nicholas Carr takes it a step further and explores how technology is actually changing the hardwiring of the brain, changing people in potentially irrecoverable ways.

Carr's desire to investigate the relationship between technology and neurology was personal. As a researcher and writer, he was finding it more and more difficult to focus on projects that demanded long, sustained periods of attention. He also noticed that he was not reading as many books as he used to and he wasn't able to concentrate when reading on his computer or device. The result of his examination was the publication of his book *The Shallows: What the Internet is Doing to Our Brains*.

The first thing Carr points to is advances in neurological studies. What Carr learned about the brain had major implications for what technology does to people. First, Carr explains neuroplasticity. Brains, as a muscle, are flexible, adaptable, and moldable. When looking at the brain scan of a violinist or taxicab drive, for example, one will notice different parts of the brain are larger. These are the parts of the brain used in repetition to play a musical instrument or navigate city streets and daily traffic. Carr writes, "As particular circuits in our brain strengthen

through repetition of a physical or mental activity, they begin to transform that activity into a habit. The paradox of neuroplasticity… is that, for all the mental flexibility it grants us, it can end up locking us into 'rigid behaviors.' The chemically triggered synapses that link our neurons program us, in effect, to want to keep exercising the circuits they've formed."[12] In other words, the repetitive activities people perform online—at a computer, on a smart phone, with a tablet—actually change the shape of the brain itself, making it more difficult to function without it.

Second, Carr reveals how much of people's online activity—scrolling websites, liking pictures, receiving email notifications—releases dopamine, a pleasure producing chemical that motivates people to do or continue doing certain activities. Food, sex and certain drugs are also stimulants for dopamine release. In fact, dopamine producing drugs can be addictive. The more dopamine one receives the more dopamine one craves. Given the amount of time people spend online or checking their phones, it is possible that people are becoming addicted to their devices. Carr makes a strong case that the internet and online activity is changing people in profound ways. He writes,

> One thing is very clear: if, knowing what we know today about the brain's plasticity, you were to set out to invent a medium that would rewire our mental circuits as quickly and thoroughly as possible, you would probably end up designing something that looks and works a lot like the Internet. It's not just that we tend to use the Net regularly, even obsessively. It's that the Net delivers precisely the kind of sensory and cognitive stimuli—repetitive, intensive, interactive, addictive—that have been shown to result in strong and rapid alterations in brain circuits and functions… the Net may well be the single most powerful mind-altering technology that has ever come into general use.[13]

Why does this matter? According to Carr, the "new brain" is not given the time it needs to transfer short-term, working memory to long-term memory. "The Web is a technology of

12 Nicholas G. Carr, *The Shallows: What the Internet Is Doing to Our Brains* (New York, NY: W.W. Norton, 2011), 34.

13 Carr, *The Shallows*, 116.

forgetfulness."[14] To use Carr's words, Google is making people stupid. He explains that this "helps explain why many of us find it hard to concentrate even when we're away from our computers. Our brains become adept at forgetting, inept at remembering… As our use of the Web makes it harder for us to lock information into our biological memory, we're forced to rely more and more on the Net's capacious and easily searchable artificial memory, even if it makes us shallower thinkers."[15]

Carr's findings reveal that a brain or a person "hooked" on the Internet will have a difficult time remaining focused, thinking deeply, and, echoing Turkle's concerns, will be "less able… to experience the subtlest, more distinctively human forms of empathy and compassion."[16] In one final plea Carr suggests that "as we grow more accustomed to and dependent on our computers we will be tempted to entrust to them 'tasks that demand wisdom.' And once we do that, there will be no turning back."[17]

Carr's book was published in 2010 and was a catalyst for deeper thinking; deeper thinking about what the Internet is doing to people's brains and also deeper thinking about life, in general. A more recent book, *The Internet of Us: Knowing More and Understanding Less in the Age of Big Data* by Michael Patrick Lynch, also focuses on deeper thinking and is a helpful "next step" for those anxious about giving to computers "tasks that demand wisdom." While Lynch's book did not garner nearly the amount of attention as *The Shallows*, his contribution is worth noting briefly because of how it builds on Carr's trepidations. Lynch focuses on knowledge and the difference between knowing and understanding. This differentiation has been

14 Carr, *The Shallows*, 193.

15 Carr, *The Shallows*, 194.

16 Carr, *The Shallows*, 221.

17 Carr, *The Shallows*, 224.

a useful and simple way to highlight the limitations of the Internet. According to Lynch, "our digital form of life, while giving us more facts, is not particularly good at giving us more understanding."[18] Understanding or wisdom, as Postman, Turkle and Carr contest a well, is what is needed more than anything in today's technological world.

According to Lynch a minimalist definition of knowing includes "having a correct belief that is grounded or *justified*, and which can therefore guide our action." In a creative way, Lynch describes the difference between "knowing," definition above, and "Google-knowing." Google knowing is quick facts and information about certain topics that a learner receives instantly. It is receptive. "If we were to define knowing as only being receptive—as accurate downloading and nothing more—then we ignore something important about the human condition." Namely, that there are other forms of knowing. Instead, people should strive to be reflective and responsible knowers, not simply receivers of other people's opinions about various subjects. Lynch calls for a deeper way of knowing, one that takes time and effort to arrive at a justified position. Ultimately, the trouble with accessing information on the Internet, or the main problem with "Google-knowing" is that it is too fast. There is no time for reflection or to build on previous knowledge. In the end, no one really knows or understands anything. Without developing other ways of knowing, people will be lost and ignorant without access to the Internet.

Lynch's book is worth noting for another, more important reason as well. Although Lynch doesn't make this connection explicitly, his arguments reveal that what is happening today with technology, especially as it relates to knowledge, is precisely why Postman sounded his alarm in the first place. Postman warned that technology— machines and computers—would slowly take over the world. He predicted a time when people would be so dependent on

18 Michael P. Lynch, *The Internet of Us: Knowing More and Understanding Less in the Age of Big Data* (New York, NY: Liveright Publishing, 2017), 16.

technology that they would be unable to imagine life without computers. In a Technopoly, Postman claimed that people would ultimately become less human, more machine-like. Turkle's research proposed that digital technology has led to the breakdown of human relationships, and has paved the way for people to look to technology to provide and satisfy human interactions and needs. And Carr's description of the newly molded, hard-wired, and possibly addictive brain, is disconcerting to say the least. [19]

Postman, Turkle, Carr and Lynch are not the only voices in this conversation, to be sure. Admittedly, the connections made in this literature review sought to make a strong case for the potential damaging effects of modern technology. But while there may be different types of challenges facing young people today, they are no different from previous generations. All people, at all times, must recognize the potential dehumanizing effects of each culture. And all Christians, in every generation, must seek wisdom and discernment to respond faithfully. Before transitioning to an important book focusing on technology and emerging adulthood, one more book about technology and the social lives of teenagers is worth examining as a counter argument to critics of the Internet and technology.

TECHNOLOGY AND CULTURE, RELATIONSHIPS AND THE BRAIN: A COUNTER ARGUMENT

It's Complicated: The Social Lives of Networked Teens by danah boyd[20]

19 Turkle makes a helpful observation about the brain that connects the work of Carr and Lynch. "In recent years, psychologists have learned more about how creative ideas come from reveries of solitude. When we let our minds wander, we set our brains free. Our brains are most productive when there is no demand that they be reactive. For some, this goes against cultural expectations. American culture tends to worship sociality. We have *wanted* to believe that we are most creative during "brainstorming" and "group think" sessions. But this turns out not to be the case. New ideas are more likely to emerge from people thinking on their own. Solitude is where we learn to trust our imaginations." See Turkle, *Reclaiming Conversation*, 62.

20 This is not a typo. The author's legal name does not include capital letters.

danah boyd is critical of much of the research being conducted about technology and the Internet, especially as it relates to teenagers. By looking at the same data and by engaging with the likes of Turkle and Carr, she arrives at much different conclusions in her book *It's Complicated: The Social Lives of Networked Teens*. It is worth noting that boyd views herself as an advocate for teenagers. Her main desire was to try to view the internet and social media from a teenager's perspective. She believes that fear drives much of the criticism of modern technologies. According to boyd, because it is new and it is different, parents are scared and confused. Boyd points out that this has always been the case. She writes, "Many adults fear networked technologies for the same reasons that adults have long been wary of teen participation in public life and teen socialization in parks, malls, and other sites where youth congregate… social media services like Facebook and Twitter are providing teens with new opportunities to participate in public life, and this, more than anything else, is what concerns many anxious adults."[21]

Boyd makes three noteworthy arguments in response to critics. First, she responds to Turkle and others who propose that teenagers are living vicarious lives through social media and failing to develop social skills. Some people worry that social media encourages teenagers to have multiple identities, creating a "false-self" on the internet as opposed to their "real-self" in real-life. Drawing from her research and interaction with teenagers, boyd disagrees. She concludes that social media is simply an extension of their social lives. In fact, it has always been a part of their lives. She writes, "Most teenagers now go online to connect to the people in their community. Their online participation is not eccentric; it is entirely normal, even expected."[22]

---

21 dana boyd, *It's Complicated: The Social Lives of Networked Teens* (New Haven, CT: Yale University Press, 2014), 10.

22 Boyd, *It's Complicated*, 4.

Boyd suggests that much of the criticism pointing to inappropriate posting or a failure of teens to recognize the "public" nature of the internet lacks context. Teens are just doing what teens always do; sharing things that are funny with friends. Boyd explains, "Many teens post information on social media that they think is funny or intended to give a particular impression to a narrow audience without considering how this same content might be read out of context. Much of what seems like inaccurate identity information is simply a misinterpretation of a particular act of self-presentation."[23]

Second, boyd attempts to counter the assumption that teenagers would prefer to interact with friends through their devices. According to the boyd, the opposite is true. Teens desire relationships and connection. That is what drives them to social media. She writes, "Teens told me time and again that they would far rather meet up in person, but that hectic and heavily scheduled nature of their day-to-day lives, their lack of physical mobility, and the fears of their parents have made such face-to-face interactions increasingly impossible."[24]

Third, boyd addresses the concern that teenagers are becoming addicted to technology. She believes that much of this concern is overblown. She explains, "There is no doubt that some youth develop an unhealthy relationship with technology… However, the language of addiction sensationalizes teens' engagement with technology and suggests that mere participation leads to pathology. This language also suggests that technologies alone will determine social outcomes. The overarching media narrative is that teens lack the capacity to maintain a healthy relationship with social media. It depicts passionate engagement with technology as an illness that society must address. It is easier for adults to blame technology for undesirable outcomes than to

---

23 Boyd, It's Complicated, 44.

24 Boyd, *It's Complicated*, 11.

consider other social, cultural, and personal factors that may be at play."[25] If young people appear to be addicted to technology and social media, boyd warns that there are probably more forces at work that have led to this pathology. In order to more accurately respond to those dynamics, parents must be willing to look in the mirror and to be honest about what young people are not receiving from *them*.

Boyd's research may not appease all of the critics but it does provide a different perspective on technology and teenagers. If forces the reader to see social media through the eyes of young people and it requires adults to put technology and social media in the proper context of larger issues surrounding teen maturation. That alone makes boyd's research germane to a thesis project focused on the effects of technology on the development of students. But boyd makes a striking observation that makes this particular book even more valuable to this project. She writes, "Teenagers may not yet be experts on navigating a world drowning in information and flush with opportunities for social interaction, but there is no reason to believe that they won't develop those skills as they continue to engage with social media. There's also no reason to think that digital celibacy will help them be healthier, happier, and more capable adults."[26]

Boyd might be correct. It could be true that teens will get better at navigating the digital world and perhaps developing better social skills when the novelty of new technology wears off. Time will tell. But the underlying assumption of OneLife's electronic policy, and the motivation behind this thesis project is to discover if, in fact, there are reasons to believe that a season of "digital celibacy" helps teenagers be "healthier, happier, and more capable adults."

TECHNOLOGY AND EMERGING ADULTHOOD

25 Boyd, *It's Complicated*, 78-79.

26 Boyd, *It's Complicated*, 93.

***iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy—and Completely Unprepared for Adulthood* by Jean M. Twenge**

The term emerging adulthood was first coined by psychologist Jeffery Arnett in 2000. Emerging adulthood refers to the time between late adolescence and being a full-fledged adult. Arnett, and other prominent psychologists and sociologists,[27] were noticing that it was taking young people longer and longer to become independent adults. The markers that typically signified adulthood such as, leaving parents' home, financial independence, education completion, full-time employment, being married and having children, were not being achieved until much later in life, oftentimes not until early thirties. In the last fifteen years, much research has been conducting on why this is the case and what it means for American culture in the early twenty first century.

Psychology professor Jean Twenge's book, *iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy—and Completely Unprepared for Adulthood,* is particularly notable for its comprehensive research and its focus on how the use of electronic/digital technology is delaying adulthood. Twenge drew from the following four national, reputable databases with a long history of surveying young people: (1) Monitoring the Future (surveying high school seniors since 1976 and 8th and 10th graders since 1991); (2) The Youth Risk Behavior Surveillance System (surveying high school students since 1991); (3) The American Freshman Survey (conducted by the Higher Education Research Institute since 1966); and (4) the General Social Survey (examining adults 18 and over since 1972). In addition to

27 For recent scholarship defining and addressing emerging adulthood see Jeffrey Arnett, *Emerging Adulthood: The Winding Road from the Late Teens through the Twenties* (New York, NY: Oxford University Press, 2004); James E. Côté, *Arrested Adulthood: The Changing Nature of Maturity and Identity* (New York, NY: NYU Press, 2000); Christian Smith and Patricia Snell, *Souls in Transition: The Religious and Spiritual Lives of Emerging Adults* (New York, NY: Oxford University Press, 2009); and David P. Setran and Chris A. Kiesling, *Spiritual Formation in Emerging Adulthood: a Practical Theology for College and Young Adult Ministry* (Grand Rapids, MI: Baker Academic, 2013).

tracking and analyzing this data, Twenge also surveyed 250 college students and conducted 23 in depth interviews.

The "iGen" generation refers to the current generation of young people born between 1995 and 2012. The demographic includes 74 million Americans, about 24% of the population who "grew up with cell phones, had an Instagram page before they started high school, and do not remember a time before the Internet." The most defining characteristic of this generation occurred in 2011-2012, the year the majority of Americans began to use smartphones, cell phones that easily access and browse the internet. This was a revolutionary shift, according to the data tracked and observed by Twenge. In other words, what defines this generation, the main thing or event that shapes people born during this time, is a handheld electronic device.

How has the smartphone shaped this generation? Twenge highlights five ways. First, smartphones are time consuming. For iGen-ers, smartphones are the last thing they look at before going to sleep and it is the first thing they look at when they wake up. According to Twenge, "iGen high school seniors spent an average of 2¼ hours a day texting on their cell phones, about 2 hours a day on the Internet, 1½ hours a day on electronic gaming, and about a half hour on video chat… that totals to six hours a day on new media—and that's just during their leisure time."[28] The usage of social media sites continue to rise as well. A staggering 97% of 12th graders use social media at least "sometimes."

Second, smartphone use limits social interaction, and iGen'ers are not developing social skills. Twenge notes, "The number of teens who get together with their friends every day has been cut in half in just fifteen years… College students in 2016 (vs. the late 1980s) spent four

28 Twenge, *iGen*, 51.

fewer hours a week socializing with their friends… An hour a day less spent with friends is an hour a day less spent building social skills, negotiating relationships, and navigating emotions."[29]

Third, smartphone use is increasing iGen'ers experiences of loneliness which, Twenge's data suggests, is leading to increased mental illness. According to Twenge, teens who spend more time on screen activities are unhappy, feel more lonely, and are depressed. Twenge points out that teen depression has "skyrocketed" in a very short period of time. In fact, "56% more teens experienced a major depressive episode in 2015 than in 2010… and 60% more experienced severe impairment. More young people are experiencing not just symptoms of depression, and not just feelings of anxiety, but clinically diagnosable major depression."[30]

Fourth, according to Twenge, smartphones can cultivate an individualistic lifestyle, which has decreased iGen'ers involvement in religious institutions. Participation in religious services and affiliation with religious groups is in decline. Twenge writes, "It is unclear where iGen'res will find community interaction to replace religion… Perhaps they won't find it at all, content to rely on their social media network, with deleterious impacts on their mental health. Or perhaps iGen'ers will affiliate with others who share their interests rather than building community through religion. Either way, the structure of American community will fundamentally change."[31]

Fifth, smartphone use leads to less civic engagement. According to the data, Twenge concludes, "The results are unequivocal: teens who spend more time on social media are more

29 Twenge, *iGen*, 71-71.

30 Twenge, *iGen*, 108.

31 Twenge, *iGen*, 142.

likely to value individualistic attitudes and less likely to value community involvement… Overall, teens who use social media are less engaged with larger social issues."[32]

Twenge makes two recommendations to curb the negative trends associated with smartphones that are particularly relevant to this thesis-project. First, she suggests limiting smartphone use significantly: limit to an hour a day if possible, never sleep near a smartphone and carve out blocks of uninterrupted time when doing work or studying. She points to a study which revealed that young people who fasted from electronics for only five days at a camp improved their social skills significantly more than a control group whose electronic use was not restricted.[33] Second, she suggests young people should take a gap year. Twenge writes, "A gap year between high school and college might be one solution to the mental health issues and lack of adult experience among college students."[34]

CONCLUSION

The leadership of OneLife originally decided to limit the technology use of its participants on little more than an intuition. The reasoning was simple: a program seeking to help students gain focus should try to eliminate distractions. Digital technology such as computers, cell phones, and tablets were disruptive. As the program has grown over the years, so has the desire to ground its guiding philosophies with solid research. The above list of books and the research each represent has been formative to the OneLife program in the following ways.

First, Postman warned that technology had the potential to take control of people's lives in ways they may not be attentive to. In fact, he feared that technological advancement would

32 Twenge, *iGen*, 176.

33 Twenge, *iGen*, 90.

34 Twenge, *iGen*, 303-304.

become a new religion in America. OneLife seeks to create space, at a critical transition in life, for young people to think more deeply what matters most and to be more aware of the kind of people they are becoming. By limiting technology, students have the opportunity to discern how much of their lives have been given over to the control of technology.

Second, Turkle's research reminds us of the importance of human interaction and conversation. To be human is to relate and converse, in person, face-to-face. OneLife is committed to helping students increase emotional intelligence. Much of OneLife's programing is designed to foster better relationships and to give students the conversational and relational skills they will need to succeed as adults. OneLife wants students to be able to read themselves and others, and to grow in empathy and compassion.

Third, Carr reveals the power of our brains and the need to be intentional in order to forge new neurological pathways. By limiting the use of technology, OneLife students are able to develop new life patterns and habits, especially related to attention and focus. OneLife also provides students with the opportunity to allow their brains to take a break from constant engagement and is able to teach the value of rest and play.

Fourth, Lynch differentiates between knowledge, understanding and wisdom. OneLife is about helping students become better learners, to grow in their understanding, to be wise, and to respond in tangible ways to what is learned. Without the Internet at their fingertips, OneLife students are required to do the hard work of learning in deeper ways.

Fifth, boyd's research is a plea for adults to better understand how teens view and use modern technologies. This helps OneLife better understand the world in which teenagers live and empathize with students as they embark on the OneLife program. Students need a sympathetic, listening ear. OneLife needs to be willing to think critically about its policies and think wisely

about the students under their care. Boyd's work reminds OneLife's leadership to think more carefully about how OneLife is preparing young people for a success.

Sixth, Twenge makes is clear that something major and abrupt happened in the lives of young people born between 1995 and 2012. She suggests that the smartphone was the culprit, leading teens in an unhealthy direction including decreased social interaction and development of social skills; increased loneliness and depression; catering to an individualistic lifestyle; and abandoning religion and civic engagement.

Electronic technology has shaped the landscape of contemporary American culture, especially the emerging adult population. There is more than enough evidence to suggest that the option of limiting electronic devices should be taken seriously in order to help young adults transition to healthy adulthood. Chapters 4 and 5 of this thesis-project will focus on students who significantly reduced their use of electronic technology while participating in a 9-month gap year program. The chapters that follow will seek to explore and reveal the difference "unplugging" can make in a young person's life.

CHAPTER 4: PROJECT DESIGN

INTRODUCTION

As stated above, the main objective of this thesis-project was to listen to students to hear and discover how they experienced OneLife's electronics policy and to discover what happened to students when something they spent a considerable amount of time doing was taken away for a long period of time. The central question is this: what happens to students in a gap year program when their use of electronic devices, especially mobile phones, is significantly reduced and limited? Even more specifically, does reducing the amount of time spent on electronic devices have a positive effect on the spiritual growth of students participating in a nine-month, Christian gap year program.

METHODOLOGY

The project itself consisted of a qualitative research methodology, utilizing semi-structured interviews. All participants answered the same twelve, predetermined questions (see below) as well as follow-up questions that came up during the interview. This methodological approach was used for five reasons. First, the strength of semi-structured interviews is that it allows the researcher to both ask each participant the same questions as well as discover new questions and areas to explore during each interview. This was important because it was the first time OneLife students had been asked to reflect on their experience in a formal setting. The pre-determined questions gave structure to the interview keeping students on task, but it also allowed the interviewer to clarify confusing or ask follow-up questions to gain even more insight.

Second, interviews allow the researcher to hear students' own words, giving participants the freedom to express their views on their own terms. It was important to empower participants

to explain their experience from their own perspective, without being given answers from which to choose.

Third, this approach also helped the interviewer to learn if the participants thoughts matched other research in the field. Giving students the opportunity to speak freely, can authenticate what other researchers are discovering as well.

Fourth, since the nature of the exercise was to ask students to discuss their lives before and after the experience, a semi-structured interview gives the researcher the opportunity to probe and press in on what seems to be making the biggest difference in a student's life. This was especially important given the nature of the OneLife program. OneLife is a very structured program focused on spiritual grow and maturation of young adults. Many aspects of the program contribute to student growth. A semi-structured interview provides an opportunity to ask direct follow-up questions to determine the precise value of limiting technology. In other words, in-depth interviews provide a context to ask repeatedly why limiting electronic technology did or did not make a difference in a student's growth.

Fifth, an important strength of an in-person interview is that it allows the researcher to know how strongly a student feels about their responses to the questions. This helps to pick up on nonverbal language and nuance of speech.

The students who participated in the study were told the following: "The purpose of this research study is to explore how the effects of the OneLife cell phone/electronic technology policy has on the spiritual growth of the participants."

The following procedure was used in the study. First, students were contacted to set up a time for the interview. Second, the student and researcher met in an agreed upon, public location.

Third, students were asked a series of questions and their answers were recorded using a digital recording device. Interviews took between thirty minutes and one hour.

PARTICIPANTS

Fifteen in-depth interviews were conducted. Eight female students and seven male students were interviewed. Each student who participated in the study had successfully completed the OneLife program and were continuing their education at Lancaster Bible College. The research procedures and questions received approval from the Institutional Review Boards for both Gordon-Conwell Theological Seminary and Lancaster Bible College (appendix).

INTERVIEW QUESTIONS

Each participant was asked the following pre-determined questions:

1. Prior to entering the OneLife Institute, what best describes how much time you spent using electronic devices (computer, phone, iPad, etc.)
    - Rarely or never
    - Less than 1 hour per day
    - Between 1 – 2 hours per day
    - Between 3 – 4 hours per day
    - Between 5 – 6 hours per day
    - More than 6 hours per day
2. Tell me about your habits and disciplines using electronic technology before OneLife.
3. Before coming to OneLife, why did you think OneLife limited technology? What was the reason for the policy as you understood it?
4. What was it like (what happened to you) when your phone was taken away?

5. During OneLife, with what activities did you replace your time that you normally spent on your phone?
6. Quote from philosopher/theologian James K.A. Smith: “What we do, does something to us.” What do you think he means? What do you think not having your phone did to you?
7. Do you think not having your phone affected your relationships (friends, family, God)? How so?
8. Would you say that not having your phone increased your ability to: reflect? Pay attention? Build friendships? How so?
9. Would you say that not having your phone increased your: Self-awareness? Others- awareness? God-awareness? How so?
10. Tell me about your habits and disciplines using electronic technology now, after participating in the OneLife program?
11. To summarize, what do you think has been the most important thing you learned from having limited technology for 9 months?
12. Is there anything else you think is important to share related to your experience with the electronic technology policies at OneLife?

DATA COLLECTION

Interviews were scheduled for an hour and typically lasted forty-five minutes. The interviews were transcribed by using a transcription service. The interviews were then analyzed to determine common themes and to compare and contrast student experiences. The decision to interview fifteen students was made based on data saturation. After fifteen interviews no new information or new themes were observed in the data.

LIMITATIONS

All human research-based projects have limitations. Data drawn using any methodology never tells the whole story or is certain of all variables. Before reporting the results of this study, there are three limitations worth noting.

First, the OneLife program is a very unique experience. Students are selected based on their desire to participate in a residential, intense learning environment focused on spiritual growth. The students in OneLife have purposefully chosen to engage in a program designed to bring about personal change and development. This makes it very difficult to determine which findings would be normative for all people in their age group.

Second, there are many factors that make OneLife an effective environment for personal change and spiritual growth. OneLife students are at an age (18-20) when many major life-altering decisions are made. Additionally, the OneLife program includes the formation of a strong, intentional community that values growth and an involved staff committed to individual student care. During the nine-months, students are also exposed to potentially "life changing" ideas, trips and service opportunities. Students are asked on a regular basis to reflect on the kind of people they are becoming and who they want to be. Because of the nature of the program, it is very difficult to isolate the variable of "limited electronic technology" when determining its effects on spiritual growth. To account for this limitation, during the interviews, students were repeatedly pressed on why not having a cellphone or access to electronics made a difference.

Third, another limitation is that students were given a language for the value of limiting technology before and during the program. The students were even recruited and "sold" the program because of the perceived value of limiting electronic technology for nine-months. Phrases such as "live with your head up;" "disconnect to reconnect;" and "we are not anti-

technology, but pro-community" were used on a weekly basis at OneLife. This provided students with a way to make sense of their experiences but was also directive as they reflected, giving them a newly acquired language to discuss how their technology effected them before, during and after OneLife.

CHAPTER 5: FINDINGS

INTRODUCTION

The focus of this thesis project is phenomenological in nature. Put simply, this study examines how students in a gap year program experienced a particular situation or phenomenon, namely, having electronic devices taken away and significantly limited for nine months. What follows is a reporting of the semi-structured interviews of fifteen students who had graduated from the program. Every student answered all twelve of the predetermined questions (see above) and some students answered appropriate follow-up questions during the interview.

ELECTRONIC DEVICE USAGE BEFORE ONELIFE

First, students were asked to consider how much time they spent using electronic devices (computers, cell phones, tablets, etc.) before coming to OneLife. On average, students reported spending 3-6 hours on electronic devices every day. One student said that he only spent 1-2 hours per day. Three students reported spending 6+ hours per day on electronic devices before coming to OneLife.

Second, students were asked to explain their "habits and disciplines" using electronic devices before coming to OneLife. While there was a range of how much electronics consumed their daily routines, none (0/15) of the students expressed intentionality regarding their habits and disciplines. The following capture the overall essence of students' remarks:

> There was zero discipline. Habits? I'd be on it during school, every break I got. I would probably check Facebook or Instagram. It was always by my side when I slept or doing homework or anything like that.

> I was basically glued to my phone. I was always either listening to music or contantly texting somebody, watching TV, and on my computer doing something else. Basically, technology was my world.

> Before OneLife my habit was to just check my phone whenever someone texted me… I don't think I had many disciplines with it. I don't think I really thought about it, I just did it mindlessly whenever I felt like it.

> I didn't really have any. I think my parents would make me not be on my phone after 10:00pm, but that was pretty much it. Personally, I didn't make any. Well, habits would be like every 5 seconds checking it. Disciplines, none.

Three of the students (3/15) noted that checking their phone was a daily ritual. Checking their phone was the first thing they did when they woke up each morning and the last thing they would do before going to sleep. A student commented, "It was habitual for sure. It was like a daily thing. First thing I do in the morning when I would get up, check my phone. First thing I do before I go to bed, check my phone."

Three of the students (3/15) specifically mentioned that their parents attempted to provide boundaries for using electronic devices. The boundaries included: no cell phones after 10:00pm; only two hours of screen time per day; and one student's parents created an electronics "contract" to monitor usage.

STUDENTS' UNDERSTANDING OF THE ELECTRONIC POLICY BEFORE ENTERING THE PROGRAM

Students were asked to explain why they thought OneLife limited electronic technology. What was the reason for the policy as they understood it? The reasons given by thirteen of the students (13/15) were very positive and focused on two main aspects of the policy: (1) to limit distractions in order to be more intentional and focused and (2) to build deeper friendships and a stronger community. The following quotes help to summarize the thoughts of most of the students in the study:

> I saw it as a way to get rid of the distraction and to have conversations eye to eye. That's basically what I would sum up my definition of why they took the phones away. Just allowing us to not always be down, but looking up.

> I think it was to teach us discipline and to better ourselves in communicating with the real world around us.
>
> I thought the reason was to limit distraction from other people. And so that we could be "all in" at the place that we were.
>
> Just being more intentional or being with the people that are right in front of you.
>
> Because kids spend too much time on their phones. So, it was really my understanding was that trying to break that habit in a pretty drastic manner… to show you that you could function just fine without it.
>
> Because it holds you back from interacting with people, interacting with the real world, reading books, just doing anything else. It is kind of just a mind-number, like an escape route. So, I could see why not like elimination, but limiting of it, would be very helpful… I think it causes you to engage reality a little bit more.

Two of the students (2/15) had negative reactions to the policy initially. Both students thought the main reason for the policy was to "shelter" students from the outside world. One student remarked, "I understood that you're trying to enforce community. But I also would joke a lot about how it's like jail and how you want to kill us and how you don't want us to have technology!"

WHAT HAPPENED TO STUDENTS WHEN THEIR PHONES WERE TAKEN AWAY

Students were asked to describe what it was like when their phone was confiscated by the OneLife staff. Nine of the students (9/15) used very positive language to describe what happened to them when their phone was taken away. They described the experience with words such as "liberating," "freedom," "stress-relieving," "enjoyment" and "excitement." Students described it this way:

> I felt freedom… It took away a big burden I didn't previously see.
>
> I think honestly it was kind of stress-relieving and I was able to just focus on everyone around me.
>
> I actually felt like a relief and a freedom because once my phone was gone that didn't give me any reason to be distracted when I was with people. So, I had a freedom to then

> interact with people one-on-one and face to face and do fun things and not worry about my phone distracting me or their phones distracting them. So, honestly it brought about a freedom and excitement.

Six students (6/15) reported strong negative feelings remembering the moment their phones were taken away. They described their experience using words and phrases such as "shock," "struggle," "unnerving," "dread," "not fun," "hard," "like my child was taken away," and "I'm not going to survive." All six students also reported that although it was difficult at first, they eventually appreciated the experience.

> At first it was like, 'I'm not even going to survive. This is going to stink. It's going to be the worst.' But then, when I got it taken it was just so cool to see how removing so much technology such as our phones, helped me grow in areas that I've never thought I'd grow in. And, get so close with the people because you have to be face to face with them. So, it was good. The outcome of it was good. I actually loved not having my phone eventually. I learned to love it.

Thirteen of the students (13/15) responded that not having their cell phones improved their sleeping habits. For many students, the time before falling asleep was spent on their phones or other electronic devices. One student remarked, at OneLife "my bed became my bed again." Another student commented that her sleeping:

> Probably improved because that's one big thing that I do at night before I fall asleep. I'm just scrolling until I get tired. It's not healthy, but it's pretty much what I do. So, when I don't have it, I just go to sleep. Yeah, just probably being able to go to bed on time, which in turn means sleeping longer, or sleeping more hours each night.

When contemplating the effects of having their electronic devices taken away, students were also asked to reflect on a quote by philosopher James K. A. Smith. Smith suggests that "what we do, does something to us." Students were then asked to consider what "not having" a phone did to them. In general, all of the students explained the quote by talking about habits and disciplines that shape their character. One student explained, "Every decision we make, just kind of shows and displays our character… the experiences we have shape us into the people we

eventually are going to be in the end." To describe what not having their phones "did to them," students described being more intentional (this word was used by all of the students) in relationships and conversations. Students also commented on how not having a phone made them more aware of themselves and what was around them:

> I realize that when I didn't have my phone I was more intentional with the people around me and more aware of my surroundings. And so, I think my phone made me kind of blind and self-focused. Because I was just wanting to know how many comments a picture I posted got or the impact or feedback other people were giving me. And now when I don't have it or when I'm aware of putting it away, I can be more engaged with what's going on around me.
>
> I think not having my phone freed my mental state, kind of freed my mind more. I feel like it also made me create my own fun and not look for funny videos on YouTube and stuff like that, but actually do fun stuff with people.
>
> Not having my phone gave me a certain freedom by not always feeling like it was ruling my life. I was able to look up and see what God is doing and not look down and get carried away… But take time and see the beauty of God.
>
> It caused me to live with my head up. I noticed during OneLife and even after OneLife I end up having conversations with people much more and meeting people that I wouldn't have otherwise. I think it brought in my thinking. It kind of forced me to think more. Because rather than being able to kind of shut off my thoughts with a device and be distracted, in times when it is quiet and nothing is going on, rather than just being able to just pull out my phone and fill that space, I'm kind of forced to confront my thoughts. And deal with them a little bit and think through them a little more.

ACTIVITIES STUDENTS ENGAGED IN THAT REPLACED TIME NORMALLY SPENT ON THEIR PHONES

Students were asked to think about with what activities replaced time typically spent on their phones or other electronic devices. Nine of the students (9/15) mentioned spending more time reading or picking up reading as a new hobby. Nine of the students (9/15) reported that they spent more time investing in face-to-face conversations and friendships. Six of the students (6/15) said that they started or re-engaged with a creative activity such as piano, painting,

writing, board games, and "creating their own games and adventure." The following quotes explain and summarize the kinds of activities students were engaged in when their time on their phones was significantly reduced:

> I actually started reading books, which I think was different for me. Before I'd only read books because they told me to when I was in school. I ended up actually starting a book collection. Started picking more up. Definitely used books as a space filler.
>
> I was able to be able to read and do my assignments to the best of my ability and actually be having time to do it and not feel pressured that I need to check my phone after a chapter or something. But I was able to really dig deep into my homework and that kind of thing.
>
> Technology usually stimulates your brain, but when I didn't have that I found other things to stimulate that creative part of my brain.
>
> There was definitely more intentionality with people. Conversations started getting deeper. Instead of just, 'Hey how are you?' 'Oh great!' let me get on my phone after you answer that question…. And it started being like, there are serious issues in each of our lives and we're all in this together. Nobody's alone. And so, from there, I started seeking out more conversations that way after OneLife.
>
> It was just really, really, eye opening to me about what goes on in people's lives for real. They tell you stuff that people don't put on social media. I guess I just never knew that stuff, maybe I was I. And I never really cared as much as I did before, but I think the lack of technology opened my eyes to people's needs and how I can care for them.

HOW LIMITING TECHNOLOGY AFFECTED RELATIONSHIPS WITH FRIENDS, FAMILY AND GOD

Students were asked if they thought that not having a cell phone affected their relationships with friends, family and God. When talking about friends, all of the students (15/15) explained that not having their phones had a positive affect on their friendships. Ten of the students (10/15) said that not having a phone lead to more depth in their friendships because of deeper conversations. Five of the students (5/15) said that not having their phones is required them to be more intentional with their friendships at OneLife and at home. In follow up

questions, students were pressed to explain how their lack of cell phones accounted for more depth and intentionality in friendships. The following quotes illustrate what they learned:

> I think it did because when you don't have your phone you can go on a deeper level with people. If you're all sitting around on your phone you show each other things you thought were funny like videos or memes or something. But you can actually share solid friendship talking about really deep things, actually looking into people's eyes and learning more about them when you're not on the surface like social media.

> I think we wouldn't have been able to have the kind of conversations that we had if we had the distraction of our cell phone… I think as human beings in general we are sort of… scared from showing emotion and showing that something is bothering us. And to have something in your pocket that is small, but still hides that, to that extent, you can post anything on social media, saying that you're fine, saying that you're totally okay. But only you know what's going on inside. When you don't have that to cover that up, it's so much easier for people to see that something is actually bothering you.

> The phone creates an option to disconnect during the awkward times of a conversation. So, the awkward times of a conversation might be when no one really has anything to say about a certain subject. And so, instead of changing the subject you just go immediately to your phone and kind of waste time in that way. Rather than, enduring the awkwardness. But, when you endure the awkwardness with someone, you get awkward in the moment, but, over time, that forms into deeper conversations, eventually you'll fill that with deeper conversations. And that's what can help a relationship grow.

Students also reflected on how not having a cell phone affected their relationship with their family. Six of the students (6/15) said that it had a neutral affect or "didn't really change much." Six of the students (6/15) mentioned that it helped them to appreciate their families more, and gave them the space "to become their own person." One student remarked that it "created a good barrier" to not rely on them as much. Five of the students (5/15) said that not having their phone improved their relationship with their parents because it required them to be more intentional. The students learned to take more advantage of the time they did have to talk to their parents, to ask better questions, to think about what they wanted to discuss with them before speaking to them, to give their parents their full attention. One student developed the practice of

writing letters regularly to his family back home. One student (1/15) said that the lack of a cell phone had a negative effect on his relationship with his parents because it "annoyed them" and they never understood the point of the policy. The following quote is a good example of how limiting phone use affected the relationships with family:

> It affected it in the sense that it helped me just not be around them as much, helped me not be as connected with them because I needed space and time away from them. I think it affected it positively because it gave me time to learn how to appreciate them and value them and grow a healthy relationship. But, they'd probably say it affected it negatively, just because they couldn't talk to me when they needed me… But I feel like it was a positive effect in the sense that I could just take time and learn how to appreciate them, and actually learn to love them and miss them.

Students also reflected on how limiting their time on cell phones affected their relationship with God. All of the students (15/15) said that not having their phone during the week had a very positive affect on their relationship with God. Ten of the students (10/15) specifically mentioned that not having their phone gave them undistracted time to be with God. Seven of the students (7/15) mentioned that not having their phones increased the depth of their devotional life, especially giving them longer periods of time for Bible reading. Four of the students (4/15) explained that not having their phone helped them to develop a prayer life. The following quotes capture how not having a phone affected their relationship with God:

> I definitely had a lot more time to spend with Him and I wasn't distracted. I didn't have the temptation to, when I'm doing devotions, to look at my Bible on my phone, I didn't have the temptation to look at my phone to see if someone had texted me. I didn't have a temptation to look at my phone to see what I had missed out on. I learned that missing out on whatever's happening in life at the moment isn't going to be as big a deal because you're spending time with God and that's more important.

> I would say because times that I was upset about things just things in my life and stuff like that, I didn't really have the option to go on Facebook and drown it out and look at pictures and stuff like that. And, I guess it was kind of uncomfortable, because I didn't have that quick fix in my back pocket… So a lot of times, I would just go and talk to God about it. And just take time to actually just sit with Him.

> …in a positive way, because there would be times when I would be having my devotions and I'd have my phone with me and if I got bored from reading whatever I was reading I would just check my phone or go on that as a distraction. But because I didn't have my phone with me, I was able to focus more and discipline myself more to just actually read what was in front of me and meditate on it.

Finally, it is worth noting one student's take on how not having access to his phone affected his relationship with God. His observation focused on truth:

> I was more concerned about what was on my phone than what was in the Bible. I didn't really care about truth. The truth that I was getting was from Facebook and social media. And when you let stuff like that dictate your life you can become lost very quickly because the world will feed you millions of philosophies at a time and you do not know which one to pick. And most of the time they don't make sense. And the thing is, God's truth makes sense. And God makes sense when you get to know Him. And because of that, because of taking away my phone, I was able to be away from those false philosophies, and just really grow in authentic truth, by authentic truth.

HOW LIMITING TECHNOLOGY AFFECTED THE ABILITY TO REFLECT AND PAY ATTENTION

Students were asked to consider how having limited technology affected their ability to reflect. All of the students (15/15) said that it affected them in a positive way noting that technology often was a distraction to deeper reflection. Nine of the students (9/15) noted specifically that not having a phone gave them time to think more deeply about their life and what they were learning. Three of the students (3/15) mentioned that not having a phone gave them the opportunity to develop the practice of journaling for the first time. The following quotes capture the students' comments:

> We try to get away from situations when we don't want to think about things. And… everything's at our fingertips so if we want an answer we don't think about it, we look it up and we have the answer immediately. And so, we don't have a deeper understanding of spiritual aspects, or academic aspects of a lot of concepts. And so, I think jumping to conclusions with electronics, just getting the answers, we've kind of lost the art of thought.

> It made you really think… Being able to sit in that not knowing, for just a little bit longer than usual, really helped me… actually think about stuff with a really critical mind… I don't know how many times I've looked something up on my phone but I don't actually remember it.

> Going to bed for example. I sit there and think. And usually, if I had my phone, I'd be on my phone until I got tired enough to just go to sleep. I'd just set my phone down and close my eyes and fall asleep five minutes later. But when I didn't have my phone, I'd end up spending a lot of time at night thinking and looking back on the day or the choices I'd made, what relationships I've been building or things I'd said. So, yea, definitely gave me more time to reflect.

Students also considered how having limited technology affected their ability to pay attention. Thirteen of the students (13/15) said that not having their phone increased their ability to pay attention by limiting distractions in conversations and in class. One student noted:

> You have nothing to just pull out of your pocket and just turn off your mind. You're there if you're talking to somebody, you're looking at them, you're listening to them, you're not letting your mind wander on your phone or cutting off that interaction just by pulling out your phone.

Two of the students (2/15) said that not having their phone didn't affect their ability to pay attention because they are easily distracted regardless of whether or not they have technology.

HOW LIMITING TECHNOLOGY AFFECTED THE ABILITY TO BUILD FRIENDSHIPS

Students were asked how having limited technology affected their ability to build friendships. All of the students (15/15) said that limiting technology helped them to build deeper friendships because it gave them the opportunity to be more intentional with having deeper conversations. According to the students, the presence of technology prevents depth in friendship because they are easily distracted and conversation never is uncomfortable. Relationships, because of technology, tend to stay on the surface and are often fake. Students noted that not

having a phone forced them to have more face-to-face conversations and look each other in the eyes. One student's comment captures the essence of the responses from all the students:

> It allowed me to have more deeper friendships than the surface level friendships. I never had the type of friendships that I formed at OneLife before, so that was kind of weird. You just create real, raw friendships with people. Rather than with people you typically just text certain things. They're not as real or intentional because it's all almost like a I.

HOW LIMITING TECHNOLOGY INCREASED SELF-AWARENESS, OTHERS-AWARENESS AND GOD-AWARENESS

Students were asked if having limited technology increased their self-awareness. All of the students (15/15) said that their self-awareness was increased because of limited technology. Again, students mentioned not being distracted as much and having the time to ask self-reflecting questions. Students are worth quoting at length:

> Yes. If you don't have something to hide behind, you have to learn who you are, which involves learning how to be self-aware and others-aware. And just be aware of everything around you: how you act, how you talk. It's a big eye-opener, because when you're hiding behind something else sometimes you don't even realize what you're saying or what you're doing. But when you don't have that to hide behind, it's like a face to face. You have to be generally more conscious, more aware. It just opens up your eyes to, wow this is actually how I am.

> Because when I would start to see something in myself… a lot of times it was uncomfortable. I keep going back to that word uncomfortable. But I think in America comfort is something we really idolize and so I think a lot of it is just uncomfortability and not wanting to see ourselves for who we really are. And so again, when I would start to feel uncomfortable about those things, if I would look through the pictures I had posted on Facebook about memories and stuff like that, I would kind of reaffirm the good qualities about myself and I wouldn't think as much about the negative things. I'd try to kind of drown those out. So not having my cell phone, I actually sat down and wrote stuff out about why I am this way and I'd talk to people about it. I really tried to figure it out.

> I guess you're more in tune with yourself when you're unplugged from what everyone else is telling you all over the world.

> Again, just because the thoughts come and I have to now take the opportunity to take them captive to think about, and time to reflect, to pray… You don't know who you are because you're getting bombarded with so many different things on the social media sites. It's like, 'you should be like this, you should look like this person, this is what these people are doing.' It's kind of like information overload. So, I guess it can be kind of confusing to realize who you are.

Students were asked if having limited technology increased their others-awareness. All of the students (15/15) said that their awareness of others was increased by not having their phones. Students mentioned that it helped them to become better listeners, made them less distracted in conversation, allowed them to notice social signals, and required them to have more face-to-face conversations. Three students (3/15) noted specifically that not having their phones helped them to better notice when people were struggling. Two of the students (2/15) mentioned social media made them more self-centered, so not having their phones helped them to be more others-centered. The following quotes capture the students perspectives on others-awareness:

> Without your phone, you're a lot more connected with people because you can pick up on social signals a lot faster and know what's going on.

> I actually listened to people, which I think was a combination of what I was learning and being more mature in the environment, but also just not being distracted. Being able to take the time and listen to people's stories and give them the time of day and not feel like I had something else I'd rather be doing.

> Because your phone makes you so self-focused. It makes you want to fill yourself up and boost your own self-confidence. Because there is nothing really you do on your phone that is serving others unless you send them a nice compliment or something like that. So, not having my phone… helped me to just look around more and observe people and appreciate things about other people honestly. I appreciated people a lot when I didn't have my cell phone. It helped me also be more attentive to how people were feeling. And so, when I would talk to people, sometimes I would be more in tune with whether they're actually doing good or whether they're just trying to say that they're doing okay. And I would just be more attentive to listen to how they're really doing.

Students were also asked to consider whether or not having limited technology increased their God-awareness. Four of the students (4/15) said that the limited technology did not increase their awareness of God. Eleven of the students (11/15) said that limiting their technology use did increase their God-awareness. The students mentioned seeing more of God, being more aware of God working in other people's lives, and spending more time in prayer and devotions. The students also explained that not having their phone helped them to make more intentional choices to be with God or to make time to nurture their relationship with God. The following quotes speak for many of the students for how their awareness of God was increased:

> It definitely made me more aware of my relationship with Him and what He can do. And just being able to see Him work through my life rather than seeing things on social media telling me what the world tells me to do or what the world sees, rather than what God sees… It was able to give me more of a Gospel-Centered focus, rather than the worldly focus on myself.

> Because being with God was an intentional choice that I was making at that time. Not having my phone meant that if I wanted to be with God it was because I was putting the time to do it. It was very easy in the past, let's say I had a Biblical question, to just look it up. But, now I'd have to go to sources or ask people or spend time praying about it. I just wouldn't have a quick solution that maybe it was good for me to learn how to take time to find out an answer that I needed through other people or whatever other way. I'd say more than anything it just gave me more time to spend with Him.

STUDENTS' HABITS AND DISCIPLINES USING ELECTRONIC TECHNOLOGY AFTER PARTICIPATING IN THE ONELIFE PROGRAM

Students were asked to discuss what their relationship to electronic technology was like after being in the OneLife program. Specifically, they were asked to identify their current habits and disciplines related to how they use electronic technology a year after experiencing nine months of restricted use. Fourteen of the students (14/15) described their current habits and disciplines as being "better" than before OneLife. One student (1/15) thought that her use of

electronic technology is “probably actually worse than it was before because I kind of like have to and everything’s gotten busier. So, I’m constantly on it.”

All of the students (15/15) commented that having limited technology simply made them more aware of the effects of technology in their own lives and in relationships. When asked to describe specific habits and disciplines the responses focused on phone use and fell into two categories: *when* students used their phones and *how* students used their phones. Examples of habits and disciplines connected to “when” included: designated specific times of day when they would put their phone away; intentionally not taking their phone when they were having conversations with friends (leaving it in their dorm room, in their car, or turned off in their bag); not having their phone near their bed at night and in the morning; not looking at social media in the morning; and keeping the phone in a basket in the kitchen when at home. Examples of habits and disciplines connected to “how” included: putting their phones upside down on their desk when doing homework or talking to a friend; texting less and calling more; not grabbing for their phone when uncomfortable, in a conversation or in a public setting; deleting Facebook from their phone; and spending less time on Snapchat.

One student’s response is worth noting for taking a more drastic approach: getting rid of a smartphone. He is worth quoting at length:

> So, now I made the decision that I know Smartphones aren’t bad, but I know with the place that I’m at I don’t think I’m mature enough to handle one the way that I’d like to right now, so I’m kind of choosing to take this time when I’m at school to focus on what I need to focus on. Do the things I need to do before I possibly bring it back into my life. So, I downgraded to a cute little track phone that can only call and text. I get a lot of funny looks for it.

THE MOST IMPORANT THING STUDENTS LEARNED FROM HAVING LIMITED TECHNOLOGY FOR NINE MONTHS

Students were asked what they thought was the most important thing they learned from having nine months of limited technology. The responses fell into two distinct categories: the importance of presence with people/relationships and the awareness of spending too much time on their devices. Seven of the students (7/15) learned that not having their phones helped them to be more present with people in conversation which lead to more depth in relationships. Seven of the students (7/15) learned that their phones were a distraction and that they spent too much "pointless time" on things that didn't really matter. The following quotes capture the most important things learned in their own words:

> I think you need to, first and foremost, focus on the people that are around you, the responsibilities that you have right in front of you, the environment that you're in and live life where you're at… I feel like people start to think that their actual identity isn't found in where they are, but it's found in the things that they see on social media and the image that they put up of themselves. So, it caused me to live where I'm at more, rather than up in the clouds.

> I learned that people are more important than I ever thought they were. If you ask someone they'd say people are important but when you actually get to know them to look in someone's eyes and realize what really hurts them, what they're really passionate about, then you don't even want to be on social media anymore. You just want to be with actual people.

> I've realized that there's a lot more to be had in life when you step out of your comfort zone. There's a lot more to be had. People are deeper when you don't have your phone. I guess you just notice them more. Conversations are more important, they're more meaningful and they're more real.

> You really don't need it. Or you really can live perfectly fine without it, or with the bare minimum. If you have a phone that just sends messages and phone calls, then you're just fine. You don't need all the extras like society tells you, you do. Without it, you can be very productive, you can be very focused. For me, it's probably the biggest distraction that I can take away easily and it will significantly affect how I spend my time.

FINAL THOUGHTS

The students were asked if they thought there was anything else that they would like to share related to their experience with the electronic technology policies at OneLife. All of the students (15/15) answered in a favorable way, making sure to note that, although it was often difficult, it was a very positive experience. Seven of the students (7/15) used the word "intentional" when describing what they learned and how it affected them during and after OneLife. The following comments from students provide a good summary of what all of the students learned:

> I loved it. I wish I could do it again. I wish I could smash my phone. Except for when I need my GPS, maybe I could have it then. But yeah, I really enjoyed it because it brought about a community that I had never been in before and I haven't been in since. Where, everyone would go to each other and be building deep relationships with each other. And it was just a lot more fun. I miss it. I think 'intentional' is always a good word too. But yea, I loved it. I don't think it's that scary; I really don't.

> Well, I'm just going to say this, I know you kids out there you find it strange that people would even think or dream of getting rid of technology, and trust me, I was right in your shoes too, but I'll tell you what, what's way more important is the person next to you. What's way more important is spending your time wisely and growing. Read a book. My dad said that to me growing up. I still don't like reading books. But I'll make time to read a book because I know that I'm going to become a wiser person.

> I think probably just how terrified I was about it before and now looking back I realize that it was really because I was so addicted to it and probably held it as an idol. Looking back on it and just realizing that it was kind of an idol and kind of an addiction, wanting my phone, wanting the attention I was getting from my phone. And then when it was taken away, honestly how little I missed it and just being able to even name those things have been helpful because I see it in other areas of my life too.

> It's something that I always liked. And it's something that I always would totally say that was one of the coolest things about the whole program and its intentionality with community in that way… We just need to learn how to be responsible with it.

It’s a very rare time in life, where we’ve grown up always having our phones, especially even the people younger than me now, always having their phones and always having the opportunity to check whatever they need to. But learning the skill to be away from it before you go into an even more busy time in your life could be so beneficial.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

INTRODUCTION

Chamath Palihapitiya was an early senior executive at Facebook from 2007 to 2011. Palihapitiya's main role at the company was to increase Facebook's userbase and he did so very successfully. Today his net worth is $1.2 billion. In a 2017 interview at the Stanford Graduate School of Business, he was asked if he had done any soul searching since being responsible for building the largest social network in the world. Palihapitiya responded, "I feel tremendous guilt… I think in the back deep, deep recesses of our minds we kind of knew something bad could happen… It literally is a point now where I think we have created tools that are ripping apart the social fabric of how society works… And it is a point in time where people need to hard brake from some of these tools and the things that you rely on. The short-term, dopamine driven feedback loops that we have created are destroying how society works… This is a global problem. It is eroding the core foundations of how people behave by and between each other."[1] Palihapitiya referred to his audience of college students as "the future leaders of the world," and his advice was to take a *hard brake* from electronic technology and social media.

The OneLife Institute gap year program has taken Palihapitiya's suggestion seriously. In order to develop and launch servant leaders who live out their Christian faith in every area of life, OneLife temporarily pulls the plug on electronics and seeks to give young adults the social skills and tools needed to help rebuild the social fabric of society. The main objective of this thesis project was to listen to students who have completed the program to learn from their

1 Chamath Palihapitiya, "Chamath Palihapitiya, Founder and CEO Social Capital, on Money as an Instrument of Change," *YouTube*, uploaded by Stanford Graduate School of Business, November 13, 2017, https://www.youtube.com/watch?v=PMotykw0SIk (accessed September 11, 2019).

experience with having limited technology for nine months. The project was guided by four questions: (1) What can be learned from the students' experience when the use of electronic technology is significantly reduced?; (2) What can be learned about the effects of limiting technology on the spiritual formation of students?; (3) What recommendations can be made to the leadership of OneLife as they consider the merits of the policy for future OneLife students?; and (4) What recommendations can be made for parents and youth ministry leaders who are considering reducing the use of electronic technology for students? What follows are answers to these questions based on what was learned from the research.

WHAT WAS LEARNED FROM STUDENTS' EXPERIENCE WHEN THE USE OF ELECTRONIC TECHNOLOGY WAS SIGNICANTLY REDUCED

As mentioned in chapter four, this study has limitations. OneLife students live in a very unique environment. Not only are OneLife students surrounded by peers who also have limited use of electronic technology, but they are also spending nine months in very close proximity to students who have all agreed to be a part of a community dedicated to spiritual growth and maturation. OneLife students are given regular time to reflect, tools to help process their experience and a language to help name what is happening to them during the program. The students who participated in the study, were a year removed from the program and had the added benefit of additional time to process their experience. With the limitations in view, the following are strong conclusions from what was learned from the students who participated in OneLife and participated in this study.[2]

First, limiting the use of electronic technology was a very positive experience for students. All of the students in the study responded favorably to having the use of electronic

2 The five findings listed were chosen based on receiving an 80% response or higher.

technology limited for a season of life and were glad to have been through it. The students concluded that having limited technology made them more aware of the effects of technology in their own lives and relationships. The students also noted that having a time of limited technology use helped them to develop better habits and practices with technology after OneLife.

Second, limiting the use of electronic technology helped students to sleep better. This finding was a surprise. The original list of questions did not include a question about sleeping habits, but thirteen out of fifteen students made a clear connection between their use of electronic devices and sleep. Before OneLife, most students would check their phones first thing in the morning and last thing before falling asleep. During the OneLife program, students reported that their "bed became their bed again" and they were able to sleep longer and rest deeper.

Third, limiting the use of electronic technology taught students the value of reflection. Not having electronics gave students much needed time to reflect. Students were able to "sit back and think." The students reported being less distracted throughout the day which provided more opportunities to "be with their own thoughts." According to the students, the limited distractions made them "happier" and "less anxious." When given time to reflect and process their experiences each day, students reported growing in self-awareness and others-awareness. Practicing reflection gave them the ability to understand how their thoughts affected their behavior and how their behavior affected others. Students also reported that practicing reflection helped them process content learned in the classroom and make connections to life.

Fourth, limiting the use of electronic technology allowed students to build deeper friendships. Students reported that not having electronic technology forced them to spend more time in face to face communication. Students were not able to "hide behind their phone" and had to learn to be present with others. This required students to be "okay with awkwardness" and

silence when being together. Before OneLife, students would go to their phone in order to fill the awkwardness and silence. During OneLife, students explained that "awkwardness lead to intimacy," and the result was deeper conversations. Being less distracted, students reported that they learned to think before they spoke and learned to ask better questions in conversation. Their conversations were not hurried or rushed. Students also noted that "looking people in the eye" helped them to discern "social signals" and to truly understand how other people were feeling as they spoke. Students reported improving on listening skills, which they connected to less surface relationships and to more deeper friendships. Limiting the use of electronic technology also gave students time to evaluate their friendships at home to determine whether or not their friendships were having a positive or negative influence in their lives. Overall, students reported the limited use of electronic technology allowed them to be more intentional in their friendships and value people and relationships more.

Fifth, limiting the use of electronic technology increased creativity and helped students develop new hobbies. All of the students spent more time reading and some students picked up reading as a "new hobby." Students noted that they enjoyed reading for the first time in their lives. Students reported re-engaging with a musical instrument they learned as a child and others started to play an instrument for the first time. Piano, guitar and drums were the instruments of choice. Students also reported that not having their phone gave them the opportunity to use the "creative part" of their brain. Students engaged in activities such as painting, writing and board games. Students also mentioned finding enjoyment in "creating their own games and adventure."

WHAT WAS LEARNED ABOUT THE EFECTS OF LIMITING TECHNOLOGY ON THE SPIRITUAL FORMATION AND GROWTH OF STUDENTS

The primary focus of the OneLife program is to provide a context and culture for students to grow spiritually. The OneLife staff are trained to assist students in their spiritual development. Students enter the program with a strong desire for discipleship and spiritual formation as they transition from adolescence to adulthood. There are many factors that contribute to the growth of the students over the course of the nine months they are in the program. It is a challenge to isolate the OneLife electronics policy as it relates to the spiritual formation and growth of students. With that being noted, based on the interviews with students, what follows are four ways in the which having limited use of electronic technology contributed to the spiritual formation and growth of students.

First, students reported having more time to nurture their relationship with God. Without the distraction of their phones, students were able to be more intentional with spiritual disciplines and practices. Students mentioned that for the first time they were able to make a conscious choice to spend time with God. Students reported spending more time in prayer, more time reading the Bible and more time journaling. Students also mentioned that the limited use of their phones, opened their eyes to seeing God in creation and in the natural beauty of the world.

Second, students reported being more "God-aware." According to students, having limited technology helped them to see God working in them and around them. Students were more aware of how God was working in other student's lives as well, which in turn made them more aware of how God was working in their lives.

Third, students reported being less focused on themselves and more focused on others. Limiting technology helped students to become less self-focused. Students learned to value people and relationships more. Students reported that they became better listeners and cared more about how others were actually doing. Using electronic technology less, helped them to

notice social signals and made them more aware of students who were struggling. According to students, not having their phone encouraged them to be more "others-centered."

Fourth, students reported being able to evaluate "false philosophies" and "seek truth." Students mentioned that having limited technology helped them to discern false narratives in society and in their own lives. Limiting technology helped students to recognize idols of their heart that they were following. Students also developed the practice of intentionally seeking answers to hard biblical questions, without the ease of searching for answers on the Internet or messaging friends or family members. Students reported that limited technology use helped them learn to pray more for answers to difficult questions.

RECOMMENDATIONS TO THE LEADERSHIP OF ONELIFE AS THEY CONSIDER THE MERITS OF THE POLICY FOR FUTURE ONELIFE STUDENTS

The fall of 2019 marked the seventh class of OneLife students entering the nine-month program. Thus far, as a result of being a part of OneLife, 280 students have experienced a significant reduction in their use of electronic technology for a period of time. This thesis project provided an opportunity to evaluate the electronics policy in order to determine its value for future OneLife students. What follows are recommendations based on what was learned through this research.

Based on the results of this study, it is recommended that OneLife continues to reduce the use of electronic technology during the OneLife program. Reducing the use of electronics has clearly been a positive experience for students.[3] Students were able to make clear connections between having limited use of electronics and their personal growth during the OneLife program.

3 It is worth noting that at the conclusion of each school year, OneLife students are asked to rate the following statement: "Limiting electronics contributed to my growth this year." The most recent survey data for the 2018-2019 scored a 8.7 on a 0-10 scale.

Students noted significant growth in their ability to reflect, pay attention, build deeper friendships and community. The policy also helped students grow in self-awareness, others-awareness and God-awareness. Overall, the students realized that much of their activity on their electronic devices was a distraction from living an intentional life. This study affirms the intuition of the OneLife leadership.

Based on the results of this study, it is recommended that OneLife creates better tools to help students as they transition back to life with phones. Students noted the challenge of returning home during breaks. It was often difficult to reintegrate into an electronically connected world. Having a time of limited use of electronics increased students' awareness of how the devices affected their relationships with friends and family. Students noted frustration with not being able to have "real conversations" with others because "everyone is on their phone all the time." Growing awareness of how electronic technology affects relationships is a positive benefit. The policy is not effective, however, if the students are unable to relate to others who do use electronics. The experience is especially ineffective if, after the completion of the program, the policy leads to hubris and isolation.

OneLife leadership should create more intentional space to have better conversations for preparing students as they return home during breaks. The conversations should alert students to the challenges they will face and help them develop a plan for reintegration. OneLife leadership should also consider ways to integrate more time with cell phones during the program to begin to develop better practices for life after OneLife. It would be interesting to see how students would respond to having their phones for a week during the program. Students could then evaluate the time they spent on their phones and determine its value. This would provide an opportunity for

staff and students to have a deeper conversation on how the use of electronic technology with affect the students after OneLife.

Based on the results of this study, it is recommended that OneLife leadership consider the ways in which parents of OneLife students are affected by having their son or daughter experience the limited use of electronic technology. Parents of OneLife students are experiencing the policy as well and experience a hard break from being able to communicate with their children on a regular basis. OneLife leadership should consider ways to help parents with the transition. It is recommended that OneLife create tools to assist parents in learning new ways to communicate. OneLife leadership should also do more to help parents see the value in limiting electronics during and after the OneLife program. It is recommended that OneLife leadership survey parents to see what can be learned from their experience. Surveys should occur at the beginning, middle and end of the program.

RECOMMENDATIONS TO PARENTS AND YOUTH MINISTRY LEADERS WHO ARE CONSIDERING REDUCING THE USE OF ELECTRONIC TECHNOLOGY FOR STUDENTS

The information collected from this research project will not only help OneLife leadership better serve its students, but the findings can also assist other leaders responsible for the maturation of young people growing up in the digital age. What OneLife has learned from reducing the use of electronic devices with students can inform the practices of others. What follows are recommendations for parents, teachers and youth ministry leaders who are considering reducing the use of electronic devices in their contexts.

First, based on the results of this study, it is recommended that *all* parents, teachers and youth workers consider ways to reduce the use of electronic technology at home, at school and in

ministry settings. Students would benefit from a digital break, reducing the use of electronic devices for a period of time. The findings of this thesis project suggest that students will welcome this break perhaps more than leaders may realize. All of the participants in this study answered that having nine months of limited use of electronic technology was a "positive experience." Students who began the program with concern or negative connotations regarding the OneLife policies "learned to love it" by the conclusion of the program. Admittedly, creating space for a nine-month digital break will be a challenge for others outside of a residential discipleship program. Leaders should consider taking an intentional break for shorter periods of time as well. The value of having time away from electronic devices is that it allows participants to reflect on how their devices are affecting their daily habits and their relationships.

Second, based on the results of this study, it is recommended that parents pay more attention to their children's routines and habits related to the use of electronic technology and establish guidelines for use. Very few students entering the Onelife program were given any parameters or restrictions by parents or guardians regarding their use of electronic devices. The majority of students reported that they were on their phones the first thing in the morning upon waking up and the last thing at night before going to sleep. As noted above, recent research is revealing connections between the regular, unmonitored use of electronic devices among adolescents to sleep deprivation, increased anxiety and depression.[4] There is more research that needs to be conducted in order to verify the direct link between negative behaviors and electronic devices, especially smartphones. During all periods of technological advancement and change

4 Psychologist Jean Twenge discusses this in her book *iGen*. She writes, "Fifty-seven percent more teens were sleep deprived in 2015 than in 1991. In just three years between 2012 and 2015, 22% more teens failed to get seven hours of sleep… Sleep deprivation is linked to myriad issues, including compromised thinking and reasoning, susceptibility to illness, increased weight gain, and high blood pressure. Sleep deprivation also has a significant effect on mood: people who don't sleep enough are prone to depression and anxiety." See Twenge, *iGen*, 114-116.

there is a subsequent time of adaptation and integration. The current moment is a unique time in world history. Technological change is happening rapidly and parents should be mindful of how it is affecting family dynamics. A recommended resource for parents considering the effects of electronic technology on family life is *The Tech-Wise Family: Everyday Steps for Putting Technology in Its Proper Place* by Andy Crouch. This book offers helpful guidelines and practices for families who want to control their use of technology without their technology controlling them. Regarding habits and routines, Crouch suggests two practices/promises that were helpful for his own family. "We are designed for a rhythm of work and rest. So one hour a day, one day a week, and one week a year, we turn off our devices and worship, feast, play, and rest together… We wake up before our devices do, and they 'go to bed' before we do."[5] Simple adjustments in routines and habits related to electronic devices will go a long way in helping parents and adolescents adapt to the new digital landscape.

Third, based on the results of this study, it is recommended that youth workers help students take an intentional break from the use of electronic devices for a designated period of time. It is clear from the interviews of OneLife students that limiting the use of electronic devices helped them to grow spiritually. Students reported being able to devote more time and focused attention to nurturing their relationship with God, became more God-aware in their daily lives and were able to build deeper relationships and more genuine community. Church youth groups can provide a context for students to intentionally limit the use of electronic technology and achieve similar results. A recommended resource to both motivate and equip youth leaders is *Digital Minimalism: Choosing a Focused Life in a Noisy World* by Cal Newport. In this book, Newport encourages readers to "declutter" their lives from electronic devices for thirty days.

5 Andy Crouch, *The Tech-Wise Family: Everyday Steps for Putting Technology in Its Proper Place* (Grand Rapids, MI: Baker Books, 2017), 83 and 111.

After thirty days, he then provides a process for reintegration. Most notably, as a computer scientist himself, Newport is not "anti-technology." His goal is to help people use electronic technology in ways that are inline with what people value most. A values driven approach to a season of limiting the use of electronic devices can easily be adapted and received by faith communities. Students should evaluate their use of electronic technology in light of a biblical worldview. That *Digital Minimalism* has appeared on national "bestseller" lists, indicates that many people are craving an opportunity and support to reduce the use of electronic devices in their lives.

A FINAL WORD

The use of electronic technology, especially digital devices such as computers, tablets and smartphones, is changing people's behaviors. With any technological advancement and change there is a period of transition as people adapt to a new normal. The current change is rapid and unprecedented. In a very short period of time, electronic devices are fundamentally altering the ways in which people communicate, gather information and build community. How people will ultimately adapt is yet to be seen. For followers of Jesus, being aware of what the devices are doing to their spiritual development is worth paying attention to. James K. A. Smith, in his book *You Are What You Love,* invites Christians to consider how their daily practices shape what they love. Smith writes, "Find time to pause for reflection on the rituals and rhythms of your life… Look at your daily, weekly, monthly, and annual routines. What are the things you do that do something *to* you? What are the secular liturgies in your life? What vision of the good life is carried in those liturgies? What Story is embedded in those cultural practices? What kind

of person do they want you to become? To what kingdom are these rituals aimed? What does this cultural institution want you to *love*?"[6]

This thesis-project has focused on what the use of electronic technology is doing to young Christians as they mature from adolescence to healthy adulthood. Many emerging adults have simply adopted the use of electronic devices with little thought or reflection. Their use has a become a way of life. The hope of the Onelife Institute is to create an opportunity for gap year students to pay attention to the things that matter most; to think more deeply about the Story that shapes their life and to evaluate the distractions that keep them from pursuing Jesus and the Kingdom of God. Taking a break from the use of electronic devices helped students to ask important questions about the kind of person they are becoming and to be honest about their loves.

The findings of this research project have revealed that students are craving a deeper vision for life and a deeper desire for community. Most importantly, it is clear from the research, that limiting the use of electronic devices has brought awareness and freedom to OneLife students. A student quote captures and summarizes what was learned, "Not having my phone gave me a certain freedom by not always feeling like it was ruling my life. I was able to look up and see what God is doing and not look down and get carried away, but take time and see the beauty of God."

6 Smith, *You Are What You Love*, 54-55.

APPENDIX A

INFORMED CONSENT DOCUMENT

Project Title:
"The effects of limiting electronic technology on the discipleship of students participating in a gap year program" (working title).

Principal Investigator:
Derek Melleby, Executive Director, OneLife Institute, Doctor of Ministry program, Gordon-Conwell Theological Seminary

PURPOSE
This is a research study. The purpose of this research study is to explore how the effects of the OneLife cell phone/electronic technology policy has on the spiritual growth of the participants. The purpose of this consent form is to give you the information you will need to help you decide whether to be in the study or not. You may ask any questions about the research, what you will be asked to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear.

We are inviting you to participate in this research study because you have successfully completely the OneLife program and have experienced, firsthand, the current policies regarding limiting technology.

PROCEDURES
If you agree to participate, your involvement will consist of a one-hour interview and a possible 30 minute follow-up interview.

The following procedures are involved in this study. First, you will be contacted to set up a time for the interview. Second, we will meet in an agreed upon, public location. Third, you will be asked a series of question and your answers will be recorded using a digital recording device.

RISKS
There are no foreseeable risks to participating.

BENEFITS
The potential personal benefits that may occur as a result of your participation in this study are helping you reflect on your own accomplishment of completing an intense program and will help shape the future policies of the OneLife program, helping even more students to deepen their relationship with God and others.

COMPENSATION
You will not be compensated for participating in this research project.

CONFIDENTIALITY

Records of participation in this research project will be kept confidential to the extent permitted by law. Derek Melleby will be the only person with access to the answers to your questions and the file will be password protected. In the event of any report or publication from this study, your identity will not be disclosed. Results will be reported in a summarized manner in such a way that you cannot be identified.

VOLUNTARY PARTICIPATION

Taking part in this research study is voluntary. You may choose not to take part at all. If you agree to participate in this study, you may stop participating at any time. If you decide not to take part, or if you stop participating at any time, your decision will not result in any penalty or loss of benefits to which you may otherwise be entitled. Any date collected prior to withdrawal will be included in the study results with your permission.

QUESTIONS

Questions are encouraged. If you have any questions about this research project, please contact:

- Derek Melleby
- 717-572-9135
- dmelleby@onelifepath.org

If you have questions about your rights as a participant, please contact the Co-Chair of the Institutional Review Board, David A. Currie, at: dcurrie@gordonconwell.edu; 978-646-4176

Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Participant's Name (printed): _____

_____ _____

Signature of Participant Date

RESEARCHER STATEMENT

I have discussed the above points with the participant. It is my opinion that the participant understands the risks, benefits, and procedures involved with participation in this research study.

_____ _____

Signature of Researcher Date

BIBLIOGRAPHY

Alter, Adam. *Irresistible: the Rise of Addictive Technology and the Business of Keeping Us Hooked*. New York, NY: Penguin Press, 2018.

Bartholomew, Craig G., and Michael W. Goheen. *The Drama of Scripture: Finding Our Place in the Biblical Story*. Grand Rapids, MI: Baker Academic, 2004.

Boers, Arthur. *Living into Focus: Choosing What Matters in an Age of Distractions*. Grand Rapids, MI: Brazos Press, 2013.

Borgmann, Albert. *Power Failure: Christianity and the Culture of Technology*. Grand Rapids, MI: Brazos, 2003.

———. *Technology and the Character of Contemporary Life: A Philosophical Inquiry*. Chicago, IL: University of Chicago Press, 1984.

Boyd, Danah. *It's Complicated: The Social Lives of Networked Teens*. New Haven, CT: Yale University Press, 2014.

Bradberry, Travis, and Jean Greaves. *Emotional Intelligence 2.0*. San Diego, CA: TalentSmart Publishing, 2009.

Brooks, David. *The Social Animal: The Hidden Sources of Love, Character, and Achievement*. New York, NY: Random House, 2011.

Cain, Susan. *Quiet: The Power of Introverts in a World That Can't Stop Talking*. New York, NY: Broadway, 2012.

Carr, Nicholas G. *The Glass Cage: How Our Computers Are Changing Us*. New York, NY: W.W. Norton, 2015.

———. *The Shallows: What the Internet Is Doing to Our Brains*. New York, NY: W.W. Norton, 2010.

Challies, Tim. *The Next Story: Life and Faith After the Digital Explosion*. Grand Rapids, MI: Zondervan, 2011.

Crouch, Andy. *Culture Making: Recovering Our Creative Calling*. Downers Grove, IL: Intervarsity Press, 2013.

———. *The Tech-Wise Family: Everyday Steps for Putting Technology in Its Proper Place*. Grand Rapids, MI: Baker Books, 2017.

Crawford, Matthew B. *The World Beyond Your Head: On Becoming an Individual in an Age of Distraction*. New York, NY: Farrar, Straus and Giroux, 2015.

Dawn, Marva J. *In the Beginning, God: Creation, Culture, and the Spiritual Life*. Downers Grove, IL: Intervarsity Press, 2009.

Dyer, John. *From the Garden to the City: The Redeeming and Corrupting Power of Technology*. Grand Rapids, MI: Kregel Publications, 2011.

Ellul, Jacques, and Willem H. Vanderburg. *Perspectives On Our Age: Jacques Ellul Speaks On His Life and Work*. Toronto, ON: Anansi, 2004.

Goleman, Daniel. *Emotional Intelligence: Why It Can Matter More than IQ*. New York, NY: Bantam, 1996.

Haigler, Karl, and Rae Nelson. *The Gap Year Advantage: Helping Your Child Benefit from Time off before or during College*. New York, NY: St. Martins Griffin, 2005.

Holmes, Jonathan. *The Company We Keep: In Search of Biblical Friendship*. Minneapolis, MN: Cruciform Press, 2014.

Jackson, Maggie. *Distracted: The Erosion of Attention and the Coming Dark Age*. Amherst, NY: Prometheus, 2008.

Jay, Meg. *The Defining Decade: Why Your Twenties Matter and How to Make the Most of Them Now*. New York, NY: Twelve Publishing, 2016.

Kinnaman, David and Aly Hawkins. *You Lost Me: Why Young Christians Are Leaving Church—and Rethinking Faith*. Grand Rapids, MI: Baker, 2011.

Levine, Arthur, et al. *Generation on a Tightrope: A Portrait of Today's College Student*. San Francisco, CA: Jossey-Bass, 2012.

Lynch, Michael P. *The Internet of Us: Knowing More and Understanding Less in the Age of Big Data*. New York, NY:: Liveright, 2016.

Middleton, J. Richard. *The Liberating Image: The Imago Dei in Genesis 1*. Grand Rapids, MI: Brazos Press, 2005.

Mouw, Richard J. *When the Kings Come Marching In: Isaiah and the New Jerusalem*. Grand Rapids, MI: Eerdmans, 2002.

Newport, Cal. *Digital Minimalism: Choosing a Focused Life in a Noisy World*. New York, NY: Penguin, 2019.

O'Shea, Joseph. *Gap Year: How Delaying College Changes People in Ways the World Needs*. Baltimore, MD: Johns Hopkins University Press, 2014.

Palfrey, John G., and Urs Gasser. *Born Digital: Understanding the First Generation of Digital Natives*. New York, NY: Basic, 2008.

Plantinga, Cornelius. *Engaging God's World: A Christian Vision of Faith, Learning, and Living*. Grand Rapids, MI: Eerdmans, 2002.

Postman, Neil. *Technopoly: The Surrender of Culture to Technology*. New York, NY: Vintage, 1992.

Reinke, Tony. *12 Ways Your Phone Is Changing You*. Wheaton, IL: Crossway, 2017.

Rhodes, Tricia McCary. *The Wired Soul: Finding Spiritual Balance in a Hyperconnected Age*. Colorado Springs, CO: NavPress, 2016.

Sasse, Benjamin E. *The Vanishing American Adult: Our Coming-of-Age Crisis--and How to Rebuild a Culture of Self-Reliance*. New York, NY: St. Martins Griffin, 2018.

Schuurman, Derek C. *Shaping a Digital World: Faith, Culture and Computer Technology*. Downers Grove, IL: Intervarsity Press, 2015.

Setran, David P. *Spiritual Formation in Emerging Adulthood: A Practical Theology for College and Young Adult Ministry*. Grand Rapids, MI: Baker Academic, 2013.

Smith, Christian. *Lost in Transition: The Dark Side of Emerging Adulthood*. New York, NY: Oxford University Press, 2011.

Smith, James K. A. *You Are What You Love: The Spiritual Power of Habit*. Grand Rapids, MI: Brazos, 2016.

Turkle, Sherry. *Alone Together: Why We Expect More from Technology and Less from Each Other*. New York, NY: Basic, 2011.

———. *Reclaiming Conversation: The Power of Talk in a Digital Age*. New York, NY: Penguin, 2015.

Twenge, Jean M. *IGen: Why Today's Super-Connected Kids Are Growing up Less Rebellious, More Tolerant, Less Happy--and Completely Unprepared for Adulthood*. New York, NY: Atria Books, 2017.

Walsh, Brian J., and J. Richard Middleton. *The Transforming Vision: Shaping a Christian World View*. Downers Grove, IL: Intervarsity Press, 1984.

White, Kristin M. *The Complete Guide to the Gap Year: The Best Things to Do between High School and College*. San Francisco, CA: Jossey-Bass, 2009.

Wilson, Jonathan R. *God's Good World: Reclaiming the Doctrine of Creation*. Grand Rapids, MI: Baker Academic, 2013.

Wolters, Albert M. *Creation Regained: Biblical Basics for a Reformational Worldview*. Grand Rapids, MI: Eerdmans, 2005.

Wright, N. T. *After You Believe: Why Christian Character Matters*. New York, NY: HarperOne, 2010.

VITA

Name: Derek Melleby
Place of Birth: Lancaster, Pennsylvania
Date of Birth: October 4, 1977

EDUCATION

- **Doctor of Ministry to Emerging Generations**, (in process)
  Gordon-Conwell Theological Seminary, South Hamilton, MA
- **Master of Arts in Higher Education**, December 2004
  Geneva College, Beaver Falls, PA
- **Bachelor of Arts in Political Science**, December 2000
  Bloomsburg University, Bloomsburg, PA
- **Study Abroad**, Spring 1999
  Sheffield Hallam University, Sheffield, England

PROFESSIONAL EXPERIENCE

- **Executive Director / Academic Director**, 2014 - present
  OneLife Institute, Lancaster, PA
- **Director**, **College Transition Initiative**, 2011-2014
  Center for Parent/Youth Understanding, Elizabethtown, PA
- **Campus Supervisor / Area Resource Specialist / College Minister,** 2001-2011
  Coalition for Christian Outreach (CCO), Pittsburgh, PA
- **Assistant Coach Men's Basketball**, 2005-2008
  Penn State Harrisburg, Middletown, PA
- **Coordinator for Young Adult Discipleship**, 2001-2004
  Evangelical Free Church of Hershey, Hershey, PA

CROSS-CULTURAL EXPERIENCE

- **Guide**, The Bible and the Land, **Israel/Palestine**, 2016, 2017, 2018
- **Speaker**, Teen Leadership Conference, **Bahamas**, 2011
- **Teacher**, Kursk Bible College, **Russia**, 2007
- **Chaperone**, American Home Life, **Japan**, 2006
- **Team Leader,** tsunamis relief, short-term missions, **Thailand**, 2005
- **Student**, Study Abroad Program, Sheffield, **England**, 1999
- **Athlete**, Basketball Camps of America, **Venezuela**, 1998

PUBLICATIONS

- *Learning for the Love of God: A Student's Guide to Academic Faithfulness* (Coauthored with Donald Opitz, Brazos, 2014)
- *Make College Count: A Faithful Guide to Life and Learning* (Baker, 2011)
- *The Outrageous Idea of Academic Faithfulness* (Brazos, 2007, IVP/Korean, 2010)